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No. 101

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INTER-AFRICAN AFFAIRS

ZAIRE, BURUNDI, RWANDA ADOPT STRATEGY AGAINST CHOLERA

LD260204Y Kinshasa AZAP in French 1530 GMT 25 Jun 78 LD/EA

[Summary] Kinshasa, AZAP--Zaire State Commissioner for Health Tshibangu returned to Kinshasa today from Bujumbura, where he took part in a meeting of health ministers from Burundi, Rwanda and Zaire.

During the meeting, the delegations adopted a common strategy in the fight against the cholera epidemic in Kivu region and in the two neighboring countries. Tshibangu has also visited Uvira hospital and the isolation center for cholera patients.

CSO: 5400

INTER-AFRICAN AFFAIRS

BRIEFS

RWANDAN-ZAIRIAN ANTI-CHOLERA MEASURES--Severe measures to be taken against cholera were at the forefront of the talks [in Bukavu] on Saturday between the Rwandan Cyangungu Province delegation led by the prefect Kagina Bonaventure and Citizen Mulemba Shamwange Mutebi, Kivu Region commissioner, and his staff. As a result, Nkombo island in Cyangungu has been declared in an epidemic state. To prevent the spread of this disease, the two delegations agreed to forbid navigation, fishing, and swimming in Lake Kivu. Before returning to Cyangungu, the Rwandan delegation, which also included Dr Shabimana, secretary general for Public Health; Dr Ndagijimana, director general, Ministry of Interior; and Dr Goodman, medical director of the Mibilizi hospital, visited certain medical units in [Bukavu], especially the Kadutu emergency center. [Text] [Kinshasa ELIMA in French 23-24 Jul 78 pp 1, 14]

CSO: 5400

INTER-AMERICAN AFFAIRS

BRIEFS

YELLOW FEVER VACCINATION--KINGSTON, Jamaica--Jamaica's Health Ministry has advised persons travelling to Colombia South America to have valid yellow fever vaccination certificates, at least ten days prior to travel. This follows reports of an outbreak of the disease in Colombia. The ministry announced that surveillance has been instituted at all ports of entry into Jamaica.--(Cana). [Text] [Georgetown GUYANA CHRONICLE in English 8 Jul 78 p 3]

CSO: 5400

INTER-ARAB AFFAIRS

SAUDI FRUIT IMPORTS BANNED BECAUSE OF CHOLERA

NC020840Y Doha QNA in Arabic 0805 GMT 2 Jul 78 NC

[Text] Abu Dhabi, 2 July--The Preventive Medicine Department of the UAE Health Ministry has recommended banning the import of fresh fruits and vegetables from Saudi Arabia because some cholera cases have appeared in Saudi Arabia's eastern area, which is adjacent to the UAE's western border.

This decision has been made within the framework of the preventive measures adopted by the Health Ministry to prevent cholera from spreading into the country.

CSO: 5400

INTER-ASIAN AFFAIRS

TRADE WITH MALDIVES RESUMED AFTER CHOLERA SCARE

BK201522Y Colombo WEEKEND in English 11 Jun 78 p 3 BK

[Text] Trade between Sri Lanka and the Maldives, which was suspended in mid-March following an outbreak of cholera in Male, has resumed.

This follows an international health certificate issued by the World Health Organisation dated May 16, that cholera in the Maldives was well under control.

The WHO certificate further states that the vibrios cannot survive in salted foods for more than 5 days. However, the port health authorities will carry out quality control tests on Maldivian cargo before they enter the Colombo port.

CSO: 5400

ARGENTINA

NEW CHAGAS DISEASE STATISTICS TROUBLE AUTHORITIES

Buenos Aires CLARIN in Spanish 7 Jul 78 p 14

[Text] San Luis (C.) Two of every ten youths signing up for the draft in this province have been found to be suffering from Chagas disease, according to information provided yesterday at a press conference with the inspector of the National Service to combat that disease, Col Carlos Romanella.

Colonel Romanella was accompanied by the commander of the 141st Artillery unit, headquartered at San Luis, Col Omar Conrado Noldrini. In very precise terms, the former officer summarized the data of a situation which may be regarded as a serious cause of concern.

High Indices

Col Romanella went on to point out that "There are two and a half million patients suffering from this terrible malady, that is some 10 percent of the country's whole population. Twenty percent of those affected also have cardiac complications. Moreover, 21.5 percent of the draftees who are completing their service in marshy areas suffer from Chagas disease and 5 percent of the ordinary citizens examined reveal Chagas-like cardiopathic conditions. These are indeed very high indices."

He, also, indicated that the disease was observed, as well, to the south of the province of Buenos Aires, a region which, hitherto, has been regarded as "clean" from this standpoint. It is, therefore, urgent that stringent measures be taken.

Romanella described the features of the campaign directed to eliminating the insect serving as a vector for Chagas disease, namely the winged bedbug. He explained that the Argentine Social Welfare Ministry had set aside a special funding, amounting to 13 thousand million pesos. In addition to the budgetary resources, a centralized organization would be established in order to exercise control over the disease for a period of five years.

He noted that during the recent visit of Vice-Admiral Julio Bardi, a plan was drawn up to spray 5,200 housing units with Malathion which is fatal for

these bedbugs. Vice-Admiral Bardi also planned to provide the province with modern equipment and a fleet of vehicles, to be acquired by means of an investment of 62,890,000 pesos, the funds to be forthcoming as a part of a national government support policy for the neediest parts of the country.

The campaign is to operate "on all fronts" but the major emphasis will be on fumigation of the homes. It was observed that the typical huts are built of adobe and finished with a thatched roof, the favorite hiding place for the vector, which in contrast can be readily cast out from houses built with less primitive materials.

Other Points of View

It was noted in San Luis that Col Romanella's firm standpoint is coherent with earlier statements made by him, with a view to stirring the national conscience in connection with this problem. Some months ago, Col Romanella requested that the province of Buenos Aires, including the area of the federal capital, should be regarded as a zone in which Chagas disease was endemic. At that time he declared that the Triatoma Infestans, or bedbug, had not proliferated originally in the foremost Argentine province as it did in Santiago del Estero, La Rioja and elsewhere in the northeast, but had penetrated slowly into the region of Buenos Aires, and no one took action opportunely against it.

Consequently, the vector has now spread over 2.5 million sq. meters of Argentine territory. An area inhabited by more than 12.5 million people, now exposed to the "vinchuca" (winged bedbug). The habits of this arthropod have been very closely studied and it was found to prefer as its habitat dirty, poorly built hovels in which it could take refuge during the daylight hours and then escape to wreak havoc on human beings during the night.

Profusion of bugs

The National Chagas disease service has entered into agreements with the provincial authorities and is acting in accordance with such instruments in order to fulfill its task more efficiently. In the case of San Luis, it should be emphasized that the very substantial number of vectors in small villages and in housing units in the rural environment creates many difficulties. Hence, joint action on the part of the authorities, doctors, teachers and merchants in each province is required, to ensure the execution of sanitary programs in housing facilities, and concurrently, to educate the population in the matter. The whole question of providing care for those already showing symptoms of the disease, whatever the degree of affliction to which they have succumbed, is an entirely different matter. The rural doctor once again would seem to be a factor of outstanding significance in the struggle against this disease. Moreover, it is up to the rural doctor to play the role of teacher in the environment in which he exercises his profession. Consequently, Romanella's warning reaches out to all of us.

EDITORIAL ON CHAGAS DISEASE

Buenos Aires CLARIN in Spanish 23 Jun 78 p 6

[Text] Within the next few days, the minister of social welfare will tour Santa Fe Province and will participate in a conference at Reconquista Air Base, during which the measures adopted in the provincial fight against Chagas-Mazza disease will be explained. Thus once again, officials and the public are making their concern and determination a reality in regard to this very serious national problem that is continually showing signs of growing despite the campaigns conducted, the research of scientific specialists and efforts to raise community awareness--which are definitely inadequate and sporadic. The dramatic situation has reached such proportions that last November the country was declared to be in a state of emergency by the National Chagas Service "in view of the uncontrolled spread of the endemic disease."

The extent of Chagas disease is presently acquiring truly alarming characteristics, enough to make it the most widespread endemic disease transmitted by insects in the Western hemisphere. The population affected in Latin America amounts to 35 million people and of that figure, Argentina has 3 million infected patients. Under these conditions, if scientific situation does not reverse, there will be 50 million Chagas patients in Latin America.

In our country, the areas affected include 19 provinces and cover 90 percent of national territory. At the present time, the only possible exception is part of Chubut Province and the province of Santa Cruz. Half of the Argentine population lives in the geographic area of the endemic disease, which means that 12.5 million inhabitants are exposed to the disease and to the effect of the cone-nose bug, which is the transmitting agent. The disease is caused by a micro-organism called *Trypanosoma cruzi*, which is injected into the human body and into that of animals, generally tame animals, with the bite of the cone-nose bug.

The campaigns of national and provincial agencies and various private organizations are aimed mainly at eradicating the cone-nose bug, increasing public awareness and prevention through knowledge of the problem and appropriate health education. The vector insect thrives in unfavorable housing and

health conditions, in poor social sectors and geographic areas and gradually tends to extend its radius of action. A camp settlement may harbor several thousand cone-nose bugs, but the phenomenon can also occur in many other modest dwellings where there are nooks and crannies, in roofs without plastered ceilings, in unplastered or unpainted walls, in areas of the house where minimum hygiene standards are not maintained.

An important means of combating the insect is insecticide spraying and this work has been carried out very vigorously for several years, but at a rate and extent which have proved to be inadequate. On one hand there is the definite possibility of applying more abundant economic, technical and human resources for larger operations and, on the other, of thoroughly changing the conditions of the respective situation within the country's economic and social reality. The camp settlement and temporary housing, poor hygiene habits and social and cultural backwardness prove to be allies to the endemic disease and its gradual worsening.

It may therefore be inferred that the seriousness of the problem and the inadequacy of the solutions tried are not only related to spraying campaigns (successful to a certain extent and in isolated instances), health care and education (which is not systematic and does not cover the entire country), although this is all very necessary and appropriate. It is important that overall plans be implemented for transforming and improving economic and social structures so that better living conditions can be created. Otherwise, Chagas disease will continue to be a result of underdevelopment and economic stagnation and a dramatic expression of social backwardness.

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ARGENTINA

VACCINE AGAINST HEMORRHAGIC FEVER SEEN NEAR

Buenos Aires LA NACION in Spanish 29 Jun 78 p 13

[Text] Under the auspices of the Emilio Ocampo Foundation, a roundtable discussion was held in the conference room to consider the topic of Argentine hemorrhagic fever, also known as mal de rostreros, which aroused much interest among those attending the discussion.

A panel composed of Drs Julio I. Maiztegui, Julio G. Barrera Oro, Mercedes Weissenbacher, Marta S. Contigiani and Celia Coto de Ravaschino was in charge of giving a fully illustrated lecture concerning the various phases of the disease, whose active period occurs during these very months.

Dr Maiztegui first stated that the disease was detected for the first time in 1953 by Dr Arribalzaga, who described a fever of a lethal nature, unknown until then, which he rightly called "virulent and contagious" and therefore urged its investigation. The outbreak had occurred in the Buenos Aires districts of Bragado and Alberti and began to spread on 9 July of the following year. Its recrudescence in 1958 was serious: it covered an area of 16,000 square kilometers.

Intense ecological research began during that year, resulting in the discovery of rodent hosts; this study established that the transmitting virus could be localized in the brains of those small animals. Communications abroad confirmed the results of researchers and today it is known, through electron microscopy, that the cause is a virus with a physical-chemical structure, which lives in a living cell in order to reproduce itself. It functions like a parasite that lives off the mechanisms of the former, with its resulting destruction.

The speaker then listed the species of transmitting rodents and explained that they are not mice (mus-mus) but are different, exclusive of areas such as those affected in our country, and that they have been studied abroad. He then mentioned their spread, about which he said it is hoped that it can be reduced and prevented. He also said that much progress has been made in studying the fever and that Argentine scientists are redoubling their efforts to produce an effective vaccine.

Dr Maiztegui--who was assisted by Dr Barrera Oro in his lecture--added that this is an "insidious" disease whose symptoms resemble those of influenza, weakness, headache, loss of appetite and pains in the abdomen and joints. He explained that those symptoms appear to be overcome and the rural worker then returns to his job, after which the disease progresses and its treatment becomes much more difficult. He stressed the urgency of diagnosing this second stage, which enormously complicates the task of medical treatment.

Dr Ravaschino explained why there are no drugs to combat the "sand virus" and then said that research is being done to develop a reactive vaccine which forms antibodies to resist the pathogen's entry into the human body. Three types of vaccine have been tested and have proved successful in some cases, but there is no absolute reliability.

Finally, Dr Maiztegui pointed out the need to intensify dissemination of the knowledge of the symptoms and characteristics of Argentine hemorrhagic fever in order to bring about its prevention as much as possible, principally in the areas traditionally attacked.

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ARGENTINA

BRIEFS

ANTIMEASLES CAMPAIGN--The National Antimeasles Vaccination Campaign, which will cover the Federal Capital and Buenos Aires, Santa Fe, Cordoba, San Luis, San Juan, La Rioja and Catamarca Provinces and will last until 14 August, will begin tomorrow. This was reported yesterday by the National Minister of social welfare, who said that in the provinces where the campaign was held last April and June, there will be a complementary vaccination. According to information provided by the ministry, all children over 9 months and under 6 years of age, who have not had measles or received previous vaccination, must be vaccinated. In case of doubt the vaccine should be administered. Vaccination will take place at national and municipal care centers and in other agencies and institutions, a list of which will be made public in each jurisdiction. Vaccination is absolutely free and mandatory. The established schedule for vaccinations is from 0800 to 1800. [Excerpt] [Buenos Aires CLARIN in Spanish 9 Jul 78 p 12] 8908

HEPATITIS OUTBREAK--Because of the appearance of a hepatitis outbreak in the town of Choele-Choel, the Secretariat of Public Health sent an investigating committee to that zone. The task force consists of professionals and technicians of the Malbran Institute. The list of them follows: Drs Emilio Santabaya, Norma Planes and Roberto Kosakaway and Mrs Zulema Diaz. Dr Raul Anibal Pascua of the National Epidemiological Institute of Mar del Plata will also go there. [Text] [Buenos Aires LA PRENSA in Spanish 12 Jul 78 p 16] 8908

CSO: 3010

AUSTRALIA

CASES OF ENCEPHALITIS REPORTED IN NORTH-WEST

Perth THE WEST AUSTRALIAN in English 8 Jul 78 pp 1, 5

[Article by Catherine Martin]

[Excerpt]

Eight cases of Australian arbovirus encephalitis have been reported from the North-West this year.

They are the first recorded cases in Western Australia.

The people affected are aged between three and 23.

Some have been treated in metropolitan hospitals—Royal Perth and Princess Margaret—and others have been admitted to hospitals in Darwin, Wyndham, Derby and Port Hedland.

There have been no deaths.

The last reported case was on June 6.

All doctors in the far North of the State have been alerted.

They have been asked to complete a full medical investigation on any patient with signs or symptoms suggesting encephalitis.

Teaching hospitals in the metropolitan area likely to receive patients from the North have received similar advice.

The outbreak has prompted the Public Health Department to introduce special efforts to detect, monitor and control the encephalitis.

Mosquito surveillance in the North by PHD officers has been stepped up.

They are working in close association with a research team headed by Professor Neville Stanley, head of the University of WA's department of microbiology.

Authority

Professor Stanley, a world authority on viruses—he isolated the Murray Valley encephalitis virus—left for Kununurra yesterday.

He joined another international authority on arbovirus problems, Professor Telford H. Work.

Professor Work recently arrived in the Kimberleys and has been working in close association with Professor Stanley for a number of years.

There are 40 known arboviruses in Australia, 31 of which do not normally affect man.

Five of the people affected in the present outbreak developed Murray Valley encephalitis, two got Kunjin, and in the other case the virus had not been identified. The clinical symptoms are identical.

The Minister for Health, Mr Ridge, said yesterday that there was no known vaccine specific for Murray Valley encephalitis or Kunjin, but the PHD was investigating the possibility that yellow fever vaccine might give some cross-immunity.

There was good evidence of a high level of immunity in the population in the Kimberleys, he said.

A working party has been set up with the Director-General of Public Health, Dr L. J. Holman, as chairman, to monitor the situation continuously.

Mr Ridge said: "The working party is continuing to consider methods of reducing the number of mosquitoes in northern areas of the State, but the vast areas of surface water and continuing rainfall pose practical difficulties."

Mr Ridge said that a heavy winter had followed a massive wet season in the North this year, resulting in an unusual increase in mosquitoes and arbovirus concentrations.

The presence of Australian arbovirus encephalitis—Murray Valley encephalitis and Kunjin—had been recognised in the Kimberleys for some years.

Dr Holman said that the disease had probably occurred in people in the North before, but had not been correctly diagnosed.

An individual would have to be attacked and bitten by a big number of ring-nosed mosquitoes to develop encephalitis.

Between 70 and 80 per cent of Aborigines, and 50 per cent of white people in the North-

West, had developed antibodies to the disease in their blood.

This meant that they had been infected by virus-carrying mosquitoes but had not developed the disease.

It was not known why some people developed encephalitis, while most built up antibodies in their blood.

Immunity was closely related to length of stay in the area.

The normal cycle of the arbovirus was from mosquito to waterfowl back to mosquito. Most mosquitoes preferred animal to human blood.

But when the mosquito had a big increase in numbers it brought man into the cycle.

The normal pattern of the bird migration was between northern Australia and the Murray-Darling basin.

There had been eight epidemics of Murray Valley encephalitis in southern Australia since 1917.

In the last outbreak in the Murray Valley in 1974 there were 58 cases and 12 deaths.

The disease had taken 150 lives throughout Australia in more than 60 years. Dr Holman said.

BOLIVIA

BRIEFS

MALARIA OUTBREAK--The Health Ministry has reported that 55 cases of malaria have appeared in Santa Rosa, Pando department, and that immediate action is being taken to counteract this malady. [La Paz EL DIARIO in Spanish 29 Jul 78 p 3 PY]

CSO: 5400

PROBLEMS WITH CHOLERA OUTBREAKS CONTINUE

Cholera Outbreak Checked

Rangoon THE WORKING PEOPLE'S DAILY in English 24 Jul 78 p 1

[Text]

MYOTHIT, 16 Jul—The incidence of cholera which occurred in Nwahla Village of Myothit Township is now under control.

This is due to preventive measures carried out by the working people as a mass movement. Only two out of 100 persons who suffered gastro-enteric disorders died in the village and one has been warded at Magwe Division People's Hospital.

In Nwahla Village, 16 miles from Myothit, cholera broke out on 5 July 1978. Of 100 persons suffering from gastro-enteric disorder, Daw Thein Tan (30), daughter of U Swai and U Kha (65), son of U Kun died, on 7 July 1978.

As soon as the disease broke out; a Health team led by Health Assistant U Myo Nwe of Wa-aing-gyi village together with members of Township Party Unit, Township People's Council and Township Peasants Asiayone immediately rushed to the village.

Due to concerted efforts, even two persons who were in critical condition were saved. One was warded at Magwe Division People's Hospital.

Members of Township Party Unit, People's Council and Peasants Asiayone then drew a plan for combating cholera and organized the working people to take active part in sanitation work in the village and its environs.—(o4i)

Cholera Still Prevalent

Rangoon THE WORKING PEOPLE'S DAILY in English 25 Jul 78 p 1

[Text] Despite efforts being made by the Health Department, with the co-operation of the public, to prevent outbreak of cholera in Burma, the disease is still prevalent in some parts of the country as a result of negligence to environmental sanitation and directives of the Health Department regarding disease prevention.

Cholera is prevalent in the country during the monsoon, May to October.

According to statistics received by the Central Epidemiological Unit of the Health Department, a total of 2,379 persons were stricken with the disease since the beginning of 1978 up to 21 July. There were 180 fatalities, the majority of which cases were brought to the hospital only when the disease is in an advanced stage.

In some parts of Burma, cholera breaks out slowly before the monsoon sets in, but intensifies in May, June and July. This year the highest number of cholera cases are reported in Mon State and Magwe, Rangoon and Irrawaddy Divisions.

Up to 21 July this year 48 cases of cholera with 11 fatalities were reported in Kachin State; 43 cases with 12 fatalities in Karen State; 8 cases with one fatality in Sagaing Division; 133 cases with 13 fatalities in Pegu Division; 500 cases in Magwe with 36 fatalities; 112 cases in Mandalay Division with 12 fatalities; 597 cases in Mon State with 13 fatalities; 98 cases in Arakan State with 11 fatalities; 394 cases in Rangoon Division with 10 fatalities; 150 cases in Shan State with six fatalities and 285 cases in Irrawaddy Division with 55 fatalities.

Chin and Kayah States and Tenasserim Division are reported to be free of cholera this year.

CSO: 5400

COLOMBIA

BRIEFS

TYPHOID FEVER DEATHS--Bucaramanga--Ten more children died recently of typhoid fever in El Papayal, a jurisdiction of Rio Negro, located north of the capital of Santander Department. The epidemic, which has already taken almost 100 lives, was first reported in middle Magdalena 1 month ago. The malaria control service has announced that it will not dispatch more people to give vaccinations into the area because 28 of them have disappeared in this guerrilla-infested region. [Bogota Radio Cadena Nacional in Spanish 1720 GMT 13 Jul 78 PA]

CSO: 5400

EAST GERMANY

SHARP DECREASE IN TUBERCULOSIS INCIDENCE NOTED

East Berlin TRIBUNE in German 2 Aug 78 p 2

[Text] Within a period of 20 years the number of tuberculosis cases in the GDR has decreased to less than one-tenth. Thereby, as pointed out by Dr Herbert Landmann, deputy director of the Berlin-Buch Research Institute for Lung Diseases and Tuberculosis, this former epidemic disease has been successfully controlled. As late as 1949, more than 100,000 new cases of this disease were counted; in 1977 there were 5,000 cases.

The annual decrease in the incidence of this dangerous infectious disease by 10 percent is the result of comprehensive prophylaxis as well as the centrally administered tuberculosis-control program in the GDR, according to Dr Landmann. Decisive advances were achieved through the introduction of mass radiography for the public in 1955. The 1962 Decree for the Prevention and Control of Tuberculosis made possible generous financial support of patients during sanatorium treatment, which required often many months. With the aid of effective combinations of medicines and the reduction of surgical operations, it was also possible to reduce in-patient treatment in favor of out-patient treatment.

CSO: 5400

EL SALVADOR

BRIEFS

TYPHOID OUTBREAK--San Salvador, 20 Jul, (ACAN-EFE)--The Salvadoran Public Health Ministry today declared hospitals, health centers and health units throughout the country on a state of emergency in view of an outbreak of typhoid fever. The ailment, usually spread in the country during the rainy season, was discovered 3 months ago but has spread in the past few weeks. There have been 200 cases reported up to now in the country's 14 departments. Lately the clinics of the Salvadoran Social Security Institute have been filled to capacity by persons afflicted with the disease. The Health Ministry has recommended that all Salvadorans take several hygienic measures to prevent illness. Flies are the main carriers of the disease. [Text] [Panama City ACAN in Spanish 1725 GMT 20 Jul 78 PA]

CSO: 5400

FIGHT AGAINST ONCHOCERCIASIS URGED

Accra GHANAIAIAN TIMES IN English 24 Jul 78 p 4

[Letter to editor from Benito Alhassan Fuseni, Ahamansu, V. R.]

[Text] There is no doubt that Onchocerciasis is one of the most dreadful eye diseases claiming the eyes of many tropical dwellers.

Fortunately, this disease is only confined to certain areas, mainly along fast flowing rivers and in the middle belt in the case of the West African sub-region.

The Jasikan district in the Volta Region is an area most heavily infested with the simulum fly, the insect vector of the disease, with the towns of Ahamansu and Papase as the nucleus.

As a step to prevent school-children from being bitten by the insect the Ministry of Education came out with a welcome decision to allow them to wear trousers and long-sleeved shirts.

But what about the other people? Is nothing going to be done to save them from this predicament? It is not uncommon to find many middle-aged men and women complaining of blurred vision, and some helplessly blind.

What is more pathetic is that people tend to attribute lost of sight to witchcraft and inheritance. The nodules forming under the skins of infested persons, which are accumulations of the fillaris worms are parasitic in nature, thus rendering the host skinny and sickly.

Thanks to technology the disease can be cured.

However, the few people who have been detected to have the disease and have had certain drugs like Banocide prescribed for them, refuse to abide by the prescription because the medicine itches.

These people should not be left ignorant at the mercy of the dreadful oncho.

The Ministry of Health should try to fight Oncho in a more positive manner.

The Onchocerciasis Control Programme of the WHO sent its personnel to conduct researches here, but nothing is forthcoming.

CSO: 4420

GUYANA

BRIEFS

FLY, MOSQUITO CAMPAIGN--A campaign has been launched against the invasion of flies, mosquitoes and sandflies in the New Amsterdam-East Berbice area. Residents report a considerable reduction in the incidence of these pests and have been urging special steps to be taken to prevent a recurrence. Chief Public Officer Alvin Harry has traced the fly nuisance to poultry farms particularly in the Tucber area. [Excerpt] [Georgetown GUYANA CHRONICLE in English 10 Jul 78 supplement pp 2-3]

CSO: 5400

ENCEPHALITIS TOLL AT 76 IN BURDWAN

Calcutta THE STATESMAN in English 22 Jul 78 p 12

[Text]

BURDWAN, July 21.—The death-toll in the encephalitis "epidemic" here has risen to 76. According to the district health authorities 189 cases have been reported so far. The epidemic has spread to 137 villages in 21 blocks of which Memari, Jamalpur, Bhatar and Galsi are the worst hit. Nine out of 29 and nine out of 21 attacks have so far proved fatal in Burdwan municipality and Burdwan sadar arcas, respectively, according to an official source.

High temperature, severe headache, a stiff neck, delirium, the tendencies to vomit and unconsciousness are the symptoms of the disease, says a health official. The epidemic suspected to be of Japanese origin, broke out in the same areas where, in 1976, it had claimed 125 lives out of 306 cases. The figures show that the particular blocks affected in that year had the worst experience this year, too.

In 1973, 88 of the 219 attacks had proved fatal in Bankura and Asansol areas where 152 villages had been affected. The maximum cases had been reported from the Asansol coalfield complex.

Most of those affected by the disease are poor people, and, particularly, those who live with cattle and other domestic animals under the same roof. The district authorities who have appealed to the people for help in their drive against mosquitos—the carriers of the virus—have advised them to sleep under mosquito-nets.

CSO: 5400

INDIA

BRIEFS

NO CHOLERA DEATHS REPORTED--Though 75 cases of cholera were reported in the city till mid-July, no one died of the disease this year. Last year, three of the 180 cholera cases proved fatal during this period. According to the Health Officer, Calcutta Corporation, this is "unprecedented" in the city's history. The disease, he said, claimed 4,000 lives in 1950 when there were 10,000 cases. It was a "major killer" in 1963 when 2,000 of the 4,500 cholera victims died. In 1973, 500 out of 1,000 attacked by the disease did not survive. In 1977, six out of 734 died. This, the Health Officer claimed, was sufficient to prove that the disease was now under control though there was little reason to be complacent. [Text] [Calcutta THE STATESMAN in English 22 Jul 78 p 7]

CSO: 5400

IRAN

MINISTER OF HEALTH DISCUSSES CHOLERA

Tehran ETTELA'AT in Persian 12 Jul 78 p 24

[Text] The Ministry of Health announced that according to reports received from WHO, effective 1 Tir [22 June] there have been breakouts of cholera in Eastern Saudi Arabia. In view of this, and especially because of the hazard of spreading the contamination to other countries of the area, the Ministry of Health has set about right away taking the necessary preventive measures to maintain the health of the pilgrims visiting the Temple of Mecca. To this end, the Ministry of Health will send a well-equipped medical staff along with pilgrims traveling to Saudi Arabia so that all necessary care is provided on the spot. In its official communication, the Ministry of Health asked the people to carefully follow the guidelines below to maintain good health:

1 - Drinking water should be safe and free of disease generating germs. To this end, only water from pipe-water supply, which is regularly disinfected, should be used. Otherwise, one must boil water before consuming it. In the event an area lacks piped-water supply and there is a risk of contamination, it is recommended to secure containers of chlorine from Health Ministry centers and clinics, dissolve a tablespoon of that powder per liter of water, add four drops of that solution to each bottle of water, wait half an hour, and then consume it.

2- Since vegetables and fruit may be contaminated with cholera, one must consume them after the following: first, clean and wash them, put them for 15 minutes in a chlorine solution, and finally rinse them with safe water.

One may also use a permanganate solution (density: 1:1000).

However, it must be borne in mind that the permanganate solution, in the above density, has no appreciable effect on germs other than those of cholera. Likewise, vinegar in a glass with a concentration of 2.5 percent in 3 liters of water is effective in disinfecting fruit and vegetables and in forestalling the outbreak of cholera.

Javel water, too, is effective as an antiseptic of fruit and vegetables. One must keep fruit and vegetables for 20 to 30 minutes in the Javel water, rinse them with safe water, and then eat.

3 - Since flies can play an important role in carrying cholera germs, to forestall fly multiplication, it is necessary to keep the environment clean, to keep garbage in plastic bags and in cans capped with lids, to dispose garbage promptly and regularly, and to disinfect garbage dumping grounds.

More Stringent Quarantine Regulations

Following WHO's alert concerning 25 cases of cholera in Saudi Arabia, more stringent quarantine regulations have been imposed at Tehran's Mehrabad Airport and at the Iranian borders. From now on, travelers entering Iran by air, sea, or land, via contaminated areas, will be required to obtain international vaccination certificates.

In this connection an official of the Health Ministry informed ETTELA'AT as follows: "The Health Ministry of the Kingdom of Saudi Arabia and WHO have jointly notified the Iranian Health Ministry in 1 Tir [22 June] of 25 cases of cholera in Eastern Saudi Arabia.

Furthermore, WHO reports that the following countries have been contaminated with cholera: Bangladesh, India, and Afghanistan.

After this warning from WHO, the Iranian Health Ministry has tightened quarantine regulations at Iran's sea/land borders, and airports, and has put into effect a special health program at the borders. According to instructions issued to quarantine officials in those areas, every traveler entering Iran from Saudi Arabia, Afghanistan, Iraq, Bangladesh, will be required to present a cholera vaccination certificate; otherwise such a traveler will be quarantined for a specified period of time."

NUMBER OF CHILDREN AFFECTED BY GASTROENTERITIS CONTINUES HIGH

Christchurch THE PRESS in English 8 Jul 78 p 1

[Text]

Hundreds of infants are still in hospital in the North Island, but the disease there is said to be easing.

Cases have now been reported in Christchurch and Dunedin.

The medical superintendent of New Plymouth Hospital (Dr P. D. Matthews) gave warning yesterday that the slight drop in admissions there since last week-end did not mean that the epidemic was over. In Wellington the Ministry of Health sounded a warning that the virus would probably spread south.

The director of the Ministry's public health division (Dr M. Collins) said that Auckland and New Plymouth were the areas worst affected.

The number of cases reported in Wellington, Christchurch, and Dunedin, was "not exceptional," said Dr Collins, but it was probable that the virus, particularly dangerous to young children, would spread there.

Professor F. T. Shannon, head of the department of paediatrics at the Christchurch Clinical School said last evening that at present there were no more cases of the condition in Christchurch than usual for this time of year.

The virus, identified as the rota virus, affected young children almost exclusively. They became rapidly dehydrated as a result of vomiting and diarrhoea, said Dr Collins, and when this happened they needed urgent replacement of fluid.

Children should be kept away from those with the illness, and if a young child showed symptoms it should be taken to a doctor as quickly as possible.

Dr Collins said he could not give exact numbers for the children affected by the epidemic, but "several hundred" had been admitted to hospital.

Two of the babies who died were in New Plymouth, the third in Palmerston North.

In Auckland, the numbers of admissions to hospital are slowing. Thirty-five children were admitted to Princess Mary Hospital last week-end, bringing the total since the beginning of June to about 300.

The wards taking the children were still full, but it appeared the worst of the epidemic was over, said the hospital's medical superintendent.

Most of the children

have suffered with a respiratory infection, fever, vomiting and diarrhoea. They have stayed in hospital about four days.

Gastro-enteritis has reached severe epidemic proportions in Opunake, near New Plymouth.

The town's two doctors are visiting up to 50 children a day, and have examined about 75 adults during the last fortnight.

It is understood that many other adults are not bothering to trouble their doctors.

The local doctors say they are at a loss to explain why Opunake has been so badly affected by the virus.

Visiting of infected children in New Plymouth Hospital has been restricted to parents.

NICARAGUA

BRIEFS

YELLOW FEVER PREVENTION--The Nicaraguan Public Health Ministry has decided to require--in view of the yellow fever cases reported in Colombia and Peru--that all persons traveling through or from those countries must have yellow fever vaccinations 10 days prior to their date of entry into Nicaragua. In addition, no wild fauna from those countries may be imported. [Managua NOVEDADES in Spanish 25 Jul 78 pp 3, 46 PA]

CSO: 5400

CHINESE DEVELOP NEW WORMWOOD TREATMENT AGAINST MALARIA

Georgetown GUYANA CHRONICLE in English 15 Jul 78 p 10

[Text]

PEKING: — Chinese scientists have developed a new herb-based drug effective in the treatment of malaria, the New China news agency reported yesterday.

The medicine, derived from the bitter plant wormwood, works quickly, is highly efficient and is low in toxicity, the agency said. It can be administered orally or by injection.

The agency noted that chloroquine has been the favoured anti-malaria drug throughout the world. But recently the micro-organisms which cause the illness have become resistant to this medication especially in Asia.

Chinese pharmacologists began in 1967 investigating the

thousands of drugs used in traditional medicine in China, concentrating on the type of wormwood known as ARTEMISIA APIACEA as a treatment of malaria.

In 1973 scientists in southern Yunan Province and Shangtung in the north extracted an effective substance from sweet wormwood (ARTEMISIA ANNUA) which was of virtually the same chemical composition.

The agency said the new drug, "ching hao su," acted faster than chloroquine in eliminating the organisms from the patient's blood and bringing down his fever, but could not completely prevent relapses. Scientists were working on this problem.

CSO: 5400

SOUTH AFRICA

MALARIA SPREAD VIEWED AS 'POTENTIALLY EXPLOSIVE'

Johannesburg THE STAR in English 21 Jul 78 p 10

[Editorial]

[Text]

IN April an anonymous Department of Health official told The Star that the increase in malaria cases was seasonal and that the situation was "under full control." Now Health Department doctors are saying that the disease has spread and the situation is potentially explosive.

Clearly somebody has lost control along the way. To a certain extent the blame belongs across our borders where funds and facilities are inadequate to combat the resurgence of malaria brought on by floods. By the same token our own South African authorities were negligent in not foreseeing the danger.

Geographical borders are not prophylactics: disease migrates effortlessly in human and insect carriers, even from distant continents. But when malaria was

virtually eliminated from areas of South Africa a few years ago, health authorities wound down their campaigns. For short-term economy and efficiency reasons they appeared to be right; however, events have proved they were wrong to relax their vigilance.

A full-scale campaign to recover lost ground is essential, but it will call for heavy spending and the use of DDT — so destructive to bird and insect life.

The decision-makers of the Department of Health should know that what they saved by not practising adequate preventive measures, they will spend many times over fighting to regain lost ground. They will never be able to relax until the whole continent is cleared of the scourge.

CSO: 5400

URUGUAY

MEASLES INOCULATION CAMPAIGN CONTINUES

In Salto

Montevideo LA MANANA in Spanish 30 Jun 78 p 12

[Text] Salto--The Salto Health Center has sufficient vaccine for the anti-measles campaign in the city and rural areas.

This large amount of vaccine will permit the massive inoculation of the entire child population against the disease, both in the city and the other populated centers of the department, pursuant to the Health Center's plan.

Inoculations will begin on 3 July. An intensive publicity campaign has been prepared by the health authorities so that the population will be fully informed of the purposes of inoculation, as well as the location of the inoculation centers, to facilitate the operation.

As is known, this disease is produced in the prespring months, at which time there is a significant rise in incidence.

In Minas

Montevideo LA MANANA in Spanish 30 Jun 78 p 12

[Article by Gustavo Varela Pereira]

[Text] Antimeasles inoculations are proceeding on schedule in the department of Lavalleja.

The action taken by the Ministry of Public Health has been well received by the people of the sierra, and the number of children inoculated up to now is acceptable.

The massive antimeasles campaign in Minas will have to be extended to the middle of next month. There are delays of 9 to 10 hours in the dispensaries.

Emphasis is placed upon the advisability of inoculating chiefly children between the ages of 6 months and 4 years, this being the age bracket during which measles has its greatest impact.

In Treinta y Tres

Montevideo LA MANANA in Spanish 29 Jun 78 p 12

[Article by Ariel Pinho]

[Text] An antimeasles inoculation campaign has also been initiated in Treinta y Tres, within the framework of the program being carried out by the Ministry of Health throughout the country.

At this very moment, the Health Center is conducting its annual inoculation campaign in schools in the interior of the department and is taking advantage of the opportunity to intensify antimeasles inoculations.

LA MANANA talked with Dr Julio Alberti, director of the Health Center, who said that no proven case of measles has yet been found in the department this year.

The doctor added that approximately 80 percent of the child population between the ages of 6 months and 4 years has been inoculated against measles. This considerably reduces the possibility that there will be an epidemic outbreak in the department.

He indicated, however, that this period of the year is favorable for the onset of the disease; and for that reason all precautions have been taken.

At this time, the Treinta y Tres Health Center has an ample supply [of vaccine] and inoculations are being administered on schedule, which leads to the prediction that the optimum number of children will be inoculated in the department within the stipulated deadlines.

In Durazno

Montevideo EL DIA in Spanish 29 Jun 78 p 14

[Article by Saul Pina]

[Text] A total of 706 children who live in our department and who fall within the antimeasles inoculation age bracket still have not received the prescribed dosage. It is the concern of the departmental Health Center that these children receive the vaccine as a means of protecting their life.

This information was given to EL DIA by the chief nurse of the Health Center, Melgar de Morales, who stated that work has proceeded at a normal pace in the inoculation campaign, with the necessary dosages and specialized personnel on hand. From 1975 until April 1978, 2,263 children have been inoculated, in the 1 to 4 years age bracket. During the same period, 2,271 children under the age of 1 year were inoculated. According to studies conducted on registered births in the same period, there are 5,240 inoculation-age children in our department. It is obvious, therefore, that 706 children still have not been inoculated. If their parents do not comply with this requirement, the life of their children is in danger, in the event they contract measles.

Health Center authorities, through this newspaper, are making an appeal to the parents of children who have not yet been inoculated to comply with the regulation. The inoculation is entirely without charge.

Rubeola Immunization for 400,000

Montevideo EL PAIS in Spanish 27 Jun 78 p 6

[Text] Some 400,000 Uruguayans between the ages of 12 months and 13 years will be inoculated against rubeola in the months of October and November. Later, the Ministry of Public Health will implement the first permanent antirubeola immunization plan at the national level in all Latin America. This disease, which principally affects children under the age of 15 years, is dangerous for pregnant women, as it can infect the fetus which may then be born with deformities of various parts of the body.

In the months of October and November, the Ministry of Public Health will organize an antirubeola inoculation campaign, EL PAIS was told last night by the director of epidemiology of that secretariat of state, Dr Leonel Perez Moreira, who said that all Uruguayans between the ages of 12 months and 13 years will be inoculated during this period.

"A total of 400,000 persons will be immunized," the Ministry of Public Health official said. He stated that at the present time public bids are being sought from all the laboratories which produce the vaccine, in the United States, England, France and Belgium, so that sufficient supplies of the vaccine will be on hand when needed to successfully undertake the operation.

Rationale

Asked about the rationale for this "antirubeola crusade," Dr Perez Moreira explained that this disease is in general not serious, but can be if it infects pregnant women. Rubeola infection can be determined through the wall of the placenta. "If this happens in the first 3 months of gestation," he said, "the baby may be born with serious deformities of various parts of the body."

The most frequent symptoms of rubeola are: "fever, large red spots (not small spots as in measles), inflamed ganglia and pronounced pain in the joints," the Uruguayan epidemiologist recalled. "Those most affected are less than 15 years of age; however, it usually happens that children transmit the disease to their parents, if they have not had rubeola. The situation is serious if the mothers are pregnant. This complicates the situation and makes the disease serious," Perez Moreira emphasized.

Once the inoculation campaign is completed, the Ministry of Public Health will implement a permanent immunization plan which will place Uruguay in an advanced position in the Latin American health scene, as there are no precedents anywhere on the subcontinent of a similar program, the minister said in conclusion.

8143

CSO: 5400

URUGUAY

159 DEATHS FROM MEASLES; HEPATITIS, FLU ALSO CONCERN

Montevideo LA MANANA in Spanish 30 Jun 78 p 7

[Text] The Public Health authorities have issued an urgent message to parents calling upon them to have their children inoculated against measles. At the same time, they reported the death of 159 children from this disease in a 1-year period, including 57 babies who had not reached the age of 12 months.

Another outbreak of hepatitis was also reported, but it was announced that next year massive inoculations against one of the types of this disease may be possible, with the use of a product now in the experimental stage.

Dr Leonel Perez Moreira, director of epidemiology in the Ministry of Public Health, placed the blame for what had happened at the doorstep of parents, as the expected response to the appeals made by the authorities had not met with the desired response.

Excellent Vaccines Available

This expert said that Public Health had made an excellent vaccine available to the general public, which is of proven effectiveness and totally without side effects.

Inoculations are administered at all official stations of the Ministry of Public Health which are permanently accessible to parents. The massive immunization plan is also underway.

However, the immunization of children has not been carried out as desired; therefore, it was felt necessary to remind parents of their responsibility so that unfortunate consequences can be avoided.

Hepatitis

Dr Perez Moreira also stated that an intensification of the hepatitis epidemic had been recorded, a phenomenon attributed in part to the movement of the population to suburban areas where the health infrastructure is deficient.

He also mentioned as a contributing factor the failure of the medical sector to supply the required information about cases of this disease.

Finally, he revealed that tests are being conducted on vaccines for one type of hepatitis virus, which very probably will be used next year for massive inoculations.

Influenza

On the subject of the classical spring epidemic, the influenza, the expert stated that recently it had started to fall off and will possibly disappear at the beginning of July.

This disease has a virulent period of from 4 to 8 weeks, with the greatest incidence between the end of May and the beginning of June.

The present virus is similar to the one which hit the United States in November 1977 and may be typified as "Russian flu virus" or "Texas flu virus."

8143

CSO: 5400

URUGUAY

MONTEVIDEO TO HOST INTERNATIONAL DIABETES SYMPOSIUM

Montevideo LA MANANA in Spanish 28 Jun 78 p 10

[Text] An International Diabetes Symposium will be held in Montevideo in November, under the auspices of the Danish Nosrdixk Foundation and with the participation of more than 200 foreign scientists.

This event, which has been in the preparation stage since December 1977, will have the top specialists from the continent, as well as from Europe and the United States.

The symposium is being organized by the Uruguayan Society of Diabetes and Nutrition, the Medical Society, Pediatrics Society and the Uruguayan Association of Diabetics, which are also coordinating all the details of the event.

Immunology To Be Explored

LA MANANA talked with Dr Perla Temesio, general coordinator of the symposium, who explained the significance it will have for continental medicine in the fight against the disease.

Dr Temesio said that "at this time, we are exploring the etiopathogenesis of the disease; and this will be the area which can give us the best results, particularly regarding American and European scientists who will participate."

She explained that "etiopathogenesis is the investigation of immunology and the part played by virus diseases in the contracting of diabetes. This is in the experimental stage, and the reports to be presented in the form of working papers will surely provide very valuable information to all of us Latin American doctors."

Plans for the Symposium

Dr Temesio emphasized the importance of this symposium to encourage young doctors to devote themselves "to a disease which has become a social problem."

In this, she will have definitive support from the second part of the program which will deal with infant-juvenile diabetes, its treatment and research.

Montevideo, which was the site of the first Latin American Diabetes Congress, will host around 500 specialists in what is being described as an important advance for successive scientific intercommunication.

The next symposium--the date for which has not yet been set--will be held in Caracas in a few months and will certainly be directly influenced by the results obtained this November in Montevideo.

Conclusions

Dr Temesio, asked for an enumeration, before the event, of the conclusions which may result from the symposium stating that "it will give us the opportunity of making our work in the field known. We will have the chance to bring ourselves up to date in immunology and diabetes and the possible influence of virus diseases in the triggering of infant-juvenile diabetes; and, finally, it will give us the opportunity of knowing the various kinds of insulin being used and the immunology of same in relation to the chronic treatment of the patient."

8143

CSO: 5400

URUGUAY

BRIEFS

HYDATIDOSIS CAMPAIGN--Carmelo--The latest action in the continuing educational program on the subject of hydatidosis, conducted by the local sub-committee throughout Colonia since last month, took place in the Patria Movie Theater. Educational films on this disease were shown, providing information on how to effectively combat hydatidosis. All questions on the subject from the many persons present were answered. The audience was made up of farmers, livestock raisers, the owners of multiple farm properties, a great number of students and the general public, all of whom attentively watched the films and listened to the questions and answers concerning the disease. [Text] [Montevideo LA MANANA in Spanish 30 Jun 78 p 12]

Florida--Police Headquarters has ordered all local police stations in the department to go ahead with the sale of "Droncit" pills at N\$3.50 each for the treatment of dogs. In this way, it is collaborating with the Antrhydatidosis Campaign of the departmental commission. [Text] [Montevideo EL DIA in Spanish 30 Jun 78 p 10] 8143

CSO: 5400

ZAMBIA

MALARIA OUTBREAK ON COPPERBELT REGION

Lusaka TIMES OF ZAMBIA in English 21 Jul 78 p 1

[Text] Seven more Chiwala Secondary School students were admitted at Ndola Central Hospital suffering from malaria on Wednesday night -- bringing the total number of students there to 17 -- acting medical superintendent, Dr Frank Asannah, confirmed yesterday.

At least 70 students were rushed to the hospital on the same day after they complained of dizziness and vomiting but the rest were discharged after being treated.

Dr Asannah said medical examinations had proved that the students were suffering from malaria.

He described the condition of the admitted students as "very good," adding that they were detaining them for further observation and would be discharged today.

And Copperbelt chief education officer, Mr Killion Banda, who visited the students at the hospital yesterday said classes at the school were being conducted normally and rules out reports of meningitis outbreak at the school.

CSO: 5400

INTER-AMERICAN AFFAIRS

BRIEFS

ANIMAL HEALTH MEETING--Within the framework of a government-to-government cooperation agreement, representatives from Peru and Ecuador opened the first joint meeting in Piura to discuss foot and mouth disease control in the border area. [Lima Domestic Service in Spanish 1200 GMT 28 Jun 78 PY]

CSO: 5400

ARGENTINA

OFFICIALS DENY RABIES REPORTS

Buenos Aires LA NACION in Spanish 29 Jun 78 p 6

[Text] La Plata--The provincial Ministry of Social Welfare issued a statement yesterday as a result of newspaper reports concerning the current status of rabies "which does not agree--the official report states--with the actual facts established by the ministry's technical agencies." The communique points out that the epidemiological situation of rabies in the province "may be considered to be in a state of favorable transition as a result of control measures specifically adopted beginning in November 1976. During that year--the communique continues--cases of animal rabies confirmed by laboratory diagnostic methods reached 4,759, whereas 2,062 cases were recorded in the 1977 period, which represents a reduction of 57 percent."

The official report also specifies that 360 cases of animal rabies were recorded as of last May and that proven cases during the same period in 1977 numbered 898, that is, there was a reduction of 60 percent. It is also noted that of the last periods studied, November 1976 was the month in which the highest number of cases of animal rabies were recorded, with 618 having been confirmed. The communique notes that canine vaccination, the elimination of street animals and proper health education should be pointed out as measures of epidemiological control.

With regard to canine vaccination operations, 1.164 million animals were immunized in 1976 and 1.590 million in 1977; approximately 82 percent of those doses were administered during the campaigns conducted from November to December and from October to December in those years. It should also be noted that about 100,000 animals were inoculated in 1978. A new campaign of canine immunization is planned, to begin next September.

Human Rabies

With respect to cases of human rabies, the statistical record makes it possible to establish that 13 cases occurred in 1976, only 5 cases in 1977 and 7 cases thus far in 1978. It was then noted that the increase in human cases during this year must be analyzed from an epidemiological standpoint, bearing in mind that the occurrence of a single case of animal

rabies is sufficient for the possible occurrence of human cases, a situation which should not cause alarm--the report states--but which should produce among the public the sense of social responsibility involved in being the owner of a dog and compliance with all issued recommendations aimed at preventing a disease that is still lethal today. Of the 7 cases which occurred this year, 5 did not follow the treatment indicated.

11915

CSO: 5400

PREVENTIVE MEASURES AGAINST AFRICAN SWINE FEVER DISCLOSED

Buenos Aires CLARIN in Spanish 25 Jun 78 p 16

[Text] Several outbreaks of a contagious disease exclusively affecting hogs have recently been recorded in various states in Brazil. The disease is African swine fever, which is very contagious and highly lethal. Naturally, there is notable concern in hog breeding circles in view of the risk that this epizootic disease may spread from the neighboring country, thus affecting our production.

CLARIN therefore spoke with agronomist Fernando Fourcade, chairman of the Argentine Hog Breeders Association, and with Dr Jorge Schiappacasse, a member of the same organization's board of directors.

Fourcade stated that the association has for 3 weeks been in constant contact with SENASA [expansion unknown] and SELSA [Health Promotion Service] authorities, observing that the problem is proving to be their most urgent one of the day, therefore all possible precautions have been taken. For example, he noted, frontier bridges have been closed and the waste from airplanes arriving at Ezeiza and other airports is properly disposed of. Fourcade then pointed out that current regulations must be observed very strictly in order to eliminate garbage feeding as a part of hog production; this squalor must be permanently ended, although the possibility of converting that residue into useful material for breeding purposes should not be ruled out.

Dr Schiappacasse then added that "the responsibility of border authorities is tremendous, since they must apply the respective measures intended to eliminate the least risk of African swine fever spreading into our country."

The fears of breeders are obviously justified, particularly since this disease does not have an effective therapeutic treatment, like most diseases caused by viruses, and also because a preventive vaccine has not been developed. Veterinarians connected with hog breeding thus feel helpless. The only resources for combating the disease are limited to the establishment of "sanitary cordons" and other measures intended to restrict the spread of the virus.

African swine fever is indigenous to the black continent, from which it spread to Portugal several years ago and from there to Spain. France also suffered some outbreak.

FURTHER REPORTS ON AFRICAN SWINE FEVER OUTBREAK

Paulinelli Denies Disease Transmission

Rio de Janeiro O GLOBO in Portuguese 26 Jul 78 p 29

[Excerpt] Yesterday, the minister of agriculture, Alysson Paulinelli, declared that there was no need for the countries importing grain from Brazil to fear contamination of their herds with swine fever resulting from exports of industrialized soybeans, because "the effort to combat the disease is being made very assiduously, and the sanitation inspection service in the soybean processing plants and stations is quite strict."

Minister Paulinelli made this assertion before the ceremony marking the opening of the Middle Paraiba Rural Producers Market in Pati do Alferes, in the municipality of Vassouras. He claimed that there was no reason to be concerned over the transmission of the disease through exports of grain or any other product, because the virus of the disease cannot survive over 5 days away from its natural habitat (pork).

Alysson Paulinelli admitted that certain countries have clearly expressed their misgivings about importing Brazilian products, but stressed the fact that the doubts could be dispelled by experts from those countries who come personally to observe the situation; because the sanitation service is really careful about preventing the transmission. He said: "Furthermore, we are the ones most concerned about preventing the contagion, so as to avoid damage to Brazil's line of exports."

The minister announced that experts from the ministry are making surveys to ascertain the actual status reached by the swine fever at present, and that the government is now still in the phase of controlling the disease, because no other device for preventing its spread is known. He said that all focuses are under control and that, when the suspicion of another possible focus is aroused, all the control measures are implemented. As for the epidemiological investigation, Paulinelli announced that it is proving quite successful.

East Europeans Checking Grain

Rio de Janeiro O GLOBO in Portuguese 26 Jul 78 p 29

[Text] Porto Alegre--At least four of the leading importers of Brazilian soybean bran, all from Eastern Europe (Romania, Bulgaria, Yugoslavia and East Germany) are now imposing restrictions on the entry of the product, requiring certification from the health authorities attesting to the fact that there is no danger of contamination of the bran by the virus of African swine fever. This disclosure was made yesterday by Rio Grande do Sul exporters.

However, there have been no reports of any cancellation of purchases to date, at least in Rio Grande do Sul (the state which accounts for nearly half of the country's bran exports). Nevertheless, a shipment of Rio Grande do Sul bran sold through middlemen and already on the high seas had to be diverted and exchanged for North American bran; because the importing country, which was not specified, refused to accept it because it was not accompanied by a sanitation certificate. Brazil and the United States are the leading exporters of soybean bran in the world, and it is the second most important item on the list of Brazilian exports, surpassed only by coffee. The importing countries fear possible contamination of the Brazilian bran with the virus of the disease that has been attacking the country's hog population, which could transmit the disease to their own hogs that consume the bran as feed.

Yesterday morning, government experts from Romania and East Germany arrived in Porto Alegre to contact the federal department of the Ministry of Agriculture in the state to become informed of the precautions that are being taken to control African swine fever. Rio Grande do Sul is one of the few states in which no focus of the disease has been officially reported to date. According to a statement made later by sources from the Ministry of Agriculture's department, the experts stressed the fact that they would only agree to the entry of Brazilian bran produced by plants which have proven that there is no danger of the disease being transmitted through the bran. During the afternoon, the experts began a series of visits to various exporting plants in the state, for that purpose.

In this connection, Rio Grande do Sul exporters revealed that, yesterday, CACEX [Foreign Trade Department] released another shipment of 210,000 tons of soybean bran for export. Since the release of new shipments had been suspended, the sources attributed the unexpected new release to the government's concern over hastening the sale of all possible quantities of the product before the restrictions on the entry of the product are increased by the importing countries.

Politics Seen Impeding Eradication

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 26 Jul 78 p 30

[Excerpt] Yesterday, the governors and state secretaries were accused of obstructing the effort to eradicate African swine fever because they refuse to

use more stringent sanitation measures with the fear that such precautions could hurt them politically. This problem was cited by members of the central and executive committees for eradication of the disease, who met all day yesterday to make an overall assessment of the work accomplished to date.

An explanation of reasons is being drawn up by the Secretariat of Agricultural and Livestock Protection, relating to the main obstacles preventing the implementation of the measures for eradication, which will be submitted to President Geisel. The latter will have to decide between two alternatives: either to eradicate the swine fever or to protect certain ARENA [National Renewal Alliance] candidates. This information was provided by some experts who took part in the meeting, because Secretary Jose Alberto Lira refused to receive the press, claiming that he was preparing a "very important document for Minister Paulinelli."

8-Hour Meeting

The experts from the central and executive committees disclosed that the meeting began at 0900 hours and did not end until 1700 hours. At first, a detailed analysis was made of every sanitary measure, and of the problems that are being encountered in the states in implementing them. They then recalled that the greatest obstacles were the governors themselves (the degree of interference on the part of each governor was not explained); because when a request or demand is made that certain measures be adopted, the governors claim that they would be politically damaging, and threaten to appeal to President Geisel.

As for "Operation Garbage," aimed at eliminating the accumulations of garbage in the urban centers, it is not working because the ministers who are responsible claim that they do not want to hurt their image in the states. According to the experts, "Operation Garbage" calls for, among other things, the elimination of those who pick over garbage "by all the available means," and that could create serious social problems. Thus, it was concluded that the greatest problem in the eradication of swine fever is the fact that this is a political year.

As for the report from the national secretary of agricultural and livestock protection, Jose Alberto Lira, which was provided the day before yesterday, on the possible ban on exports of grain produced in areas that are focuses of swine fever, the minister of agriculture, Alysson Paulinelli said that this may not be necessary. But he admitted that Brazil could be subjected to some international pressure of a strictly economic type with a view toward gaining advantages in prices, based on the allegation that the swine fever exists in the country.

Paulinelli said that he was being very candid in terms of explaining the sanitation measures for eradication to the public. He said: "We have already invited all the countries which may have misgivings about the validity of our work to come to Brazil."

Specialist Cites Erroneous Measures

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 28 Jul 78 p 26

[Text] "A great deal of nonsense about African swine fever is being said at present. It is likely that this disease does not exist in Brazil; and, if it does exist, it has been established in the country longer than the government claims. The government has been adopting incorrect methods to combat it." These statements were made yesterday by veterinarian Claudio Lowenthal, who has been working with hogs since 1969 and has taken a special course on the subject in Hannover, Germany.

According to Lowenthal, there is no common denominator between the African swine fever in other countries and the type occurring in Brazil; a fact which evokes doubts about its existence. "Normally, African swine fever is a disease with a high mortality rate (90 percent of the animals die during the acute phase of the disease), but that is not happening here. The African swine fever causes characteristic lesions (hemorrhages in various organs), and is sometimes confused with hog cholera, which has not occurred in Brazil. It is also strange that focuses of the disease have appeared on small farms, and have not affected the large breeding areas located in the adjacent areas."

According to the veterinarian, the existence of focuses of the disease in areas far removed from one another (for example, Ilha do Marajo and Santa Catarina) proves that African swine fever does not exist; because the latter follows an epidemiological cycle. But it could also indicate that the disease has existed for some time; in other words, on this assumption, the experts are only detecting part of the total area that is infected. He added that, in this case, the country would be faced with an African swine fever with "attenuated" characteristics.

To back the argument that, if the disease exists, it has been established for some time, Lowenthal said that it was "very fortuitous for the government to have succeeded in diagnosing the first cases of the disease in such an atypical form."

Moreover, Lowenthal doubts that the methods used by the government could prove capable of eradicating an outbreak of African swine fever. In the first place, because "the breeders are afraid to report the deaths of hogs to the authorities, inasmuch as there is no indemnification for the focus (the government is paying indemnification in the perifocal areas)." Secondly, because the method of disinfecting automobiles is incorrect: "The cars should be washed completely, not just the tires, as has been the case."

Support

Yesterday, through its chairman, Rene Debois, the Federal Council of Veterinary Medicine released a note to the press, "giving complete support" to the action of the Ministry of Agriculture in combating African swine fever,

"because it is of the opinion that the National Secretariat of Agricultural and Livestock Protection is pursuing the goal of eradicating the disease as promptly as possible." The report "explains to the public, based upon scientific data and many years of observation, that the disease does not attack human beings, and not a single such case has ever been reported anywhere in the world."

In its capacity as an entity overseeing professional practice, the Council "reaffirms the confidence of its members in the ability of the veterinarians responsible for the diagnosis of the virus and for the resultant sanitary measures indicated. It likewise gives assurance that the diagnostic methods (immunofluorescence, immunodiffusion and virus cultures) used in Brazil to detect African swine fever "are of high quality, and capable of affording complete safety."

However, the representatives of the veterinarians call upon the federal government to inspect the sanitary vigilance services on borders and in landing areas.

Two More Parana Focuses

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 28 Jul 78 p 26

[Text] Two more cases (in Siqueira Campos and Curitiba) have brought the number of focuses of African swine fever in Parana to 14. Of the total of 50 samples collected in the state thus far, the results of 25, the last of which was collected 3 days ago, are still pending. The great concern now is the danger of the disease spreading to the west and southwest of Parana, where half of the state's hog population, estimated at 4.8 million head, is concentrated.

However, to date there have been only two focuses in those areas: one in Santa Helena, in the west, and the other in Vere, in the southwest. And, among the material suspected on the basis of the results, there is only one sample collected in Cascavel, in the western area. According to a report made yesterday by the Ministry of Agriculture in Curitiba, the rest are from breeding places in the northern region, where the main outbreak has been concentrated thus far.

According to Roulien Basaglia, the state representative of the Ministry of Agriculture in Parana, 1,751 hogs have already been slaughtered in the state. This week, an additional 500 hogs will be slaughtered in Santa Helena, in property adjoining the focus which appeared in that town, where hogs are dying. Yesterday, there was considerable suspicion of a new focus in the northern area, which might be confirmed today; but the ministry declined to report in advance which town was involved.

As Basaglia explained, in Vere, in the southwest, the measures to control the disease have been intensively redoubled, because there is a great danger of

its spreading in the area, and the economic repercussions of the problem are even more serious. The entire municipality has stopped any movement of hogs, and even the entry or departure of byproducts is impossible.

Roulien Basaglia explained that the payment of indemnification has not begun yet, because the Ministry's department in Curitiba has not received the payment being made in the interior. He added: "When this occurs, the payment will be made within a week at the most, because we already have the funds available."

Committee

The committee of representatives from the governments of Poland, East Germany and Romania which has toured producing regions in Parana during the past few days visited soybean milling plants and the ports of Paranagua and Rio Grande to ascertain whether there is any danger of the spread of African swine fever through exports of Brazilian products. Today, in Brasilia, the preventive measures to be adopted will be established and, if need be, the special precautions that might have to be taken.

Upon landing in Brazil last night, the experts declined to make any statement, claiming that they could not say anything until after today's meeting. Poland is the largest purchaser of Brazilian soybean bran, and its imports of that product in 1977 amounted to about 450,000 tons.

Pork Entering Bahia Checked

Rio de Janeiro O GLOBO in Portuguese 24 Jul 78 p 7

[Text]Salvador--Today, the Bahia Secretariat of Agriculture will open an investigation to determine who was responsible for the entry of 45 tons of pork from Santa Catarina into the state, 27 tons of which were burned by the Animal Sanitation Emergency Committee. Secretary Jose Guilherme da Mota announced that if any collusion is discovered among employees working in the districts located on several federal and state roads, they will be punished "with maximum severity."

Jose Guilherme da Mota backed the initiative of the director of GERFAB [expansion unknown], who burned part of the shipment when informed that the Sadia Meat-Packing Company, the owner of that shipment of pork, was about to receive a court injunction to halt the operation.

The secretary said: "It is ridiculous and heartless of these dealers who are trying to bring suspected meat into a state which does not have an African swine fever."

In his opinion, the incident is even more serious because BR [Brazilian Highways] 101 and 106, which provide access to the entire northeast, pass through Bahia.

"Any focus here could spread throughout the entire northeast, a region that is economically poorer than the southern part of the country wherein a large sector of the population raises hogs as a food and income supplement."

Another Seizure

At the end of the week, in addition to 27 tons from Santa Catarina, in an operation attended by the secretary of agriculture, another 510 kilograms of salt pork were burned. It had arrived in Salvador in a small truck, concealed in bags of powdered milk, and was seized in the GERFAB area before it was unloaded.

Mato Grosso Hogs Infected

Rio de Janeiro O GLOBO in Portuguese 26 Jul 78 p 8

[Text] Campo Grande--Two focuses of African swine fever were confirmed in Mato Grosso, located in Brasilandia and Ponta Pora, on Brazil's border with Paraguay. This fact was disclosed yesterday by veterinarian Daniel Carneiro, a member of the committee for eradication of swine fever which is operating in the Ministry of Agriculture's department in Campo Grande.

Daniel Carneiro said that veterinarians have already been sent to the infected areas, determined to slaughter the contaminated animals and to set up a disinfection station on the bridge which connects Mato Grosso with the territory of Sao Paulo.

The vaccine against hog cholera manufactured in Brazil (the the violet crystal type), in addition to offering "slow and slight immunization," could become a focus of contamination with African swine fever, because it is extracted from hogs, the only animal attacked by the disease. This is the opinion of the Portuguese veterinarian, Carlos Goncalves Ferreira, one of the participants in the panel discussion on swine fever held as part of the First International Congress of Portuguese-Speaking Veterinarians.

The specialist said that the vaccine to counter hog cholera had been made 18 months ago in cellular and rabbit cultures in Portugal and the majority of other countries, and had proven to be far more safe and efficient.

2909

CSO: 5400

BRAZIL

HOG CHOLERA VACCINE TIED TO SWINE FEVER OUTBREAKS

PY222358Y Porto Alegre Radio Guaiba in Portuguese 2150 GMT 22 Jun 78 PY

[Text] Sao Paulo--The Ministry of Agriculture has banned all hog cholera vaccines. The action was implemented in view of the suspicion that African swine fever could have reached the country through contaminated vaccine. This suspicion is based on evidence that two of the African swine fever outbreaks existing in the country have no epidemiological connections.

The government will lift the ban only after identifying the source of the serum used to manufacture these vaccines. Minister Alysson Paulinelli stated, on the other hand, that only nine African swine fever outbreaks have been confirmed in the country: five in Rio de Janeiro, three in Sao Paulo and one in Minas Gerais.

CSO: 5400

BRAZIL

BRIEFS

AFRICAN SWINE FEVER--The National Secretariat of Agricultural Assistance has confirmed the appearance of African swine fever in (Cachoeira do Arari) in Marajo Island, Para State, and in (Jose de Freitas), in Piaui State. Thus the disease which has been affecting the central and southern areas of the country is spreading to the north and northeast regions.

[Text] [Sao Paulo Cadeia Verde Amarela in Portuguese 1000 GMT 14 Jul 78 PY] Brasilia--The Agriculture Ministry has reported new outbreaks of the African swine disease in (?Sao Joaquin), Campos Novos, (Sao Dudujevo) and Imbituva, Santa Catarina State; and in Congonhas do Campo, Minas Gerais State. [Text] [Porto Alegre Radio Guaiba in Portuguese 2150 GMT 17 Jul 78 PY]

CSO: 5400

DOMINICA

BRIEFS

SWINE FEVER OUTBREAK--Roseau, Dominica (CANA)--An outbreak of Swine fever in the north of Dominica has already killed a number of pigs and a section of the area has been placed under quarantine, agricultural officials here have said. A directive from the Veterinary Section of the Ministry of Agriculture has called on farmers not to move pigs from the area or within the quarantined area. It also warned that no reject bananas were to be moved from the affected area. [Text] [Georgetown GUYANA CHRONICLE in English 8 Jul 78 p 6]

CSO: 5400

HONDURAS

MEASURES ADOPTED AGAINST AFRICAN SWINE FEVER

PA222316Y Paris AFP in Spanish 0409 GMT 23 Jun 78 PA

[Text] Tegucigalpa, 21 Jun (AFP)--The Honduran Government declared a state of alert today against African swine fever, a highly contagious disease which could enter the country and cause serious difficulties for the swine breeders, it was officially reported. The interregional agricultural sanitation organization reported outbreaks of the fever in Brazil. Quarantine measures are being implemented in the different air, land and maritime points of Honduras.

CSO: 5300

MEXICO

PREVENTIVE MEASURES TAKEN AGAINST AFRICAN SWINE FEVER

Paris AFP in Spanish 2039 GMT 26 Jul 78 PA

[Text] Mexico City, 26 Jul (AFP)--Oscar Valdes Ornelas, director of the Animal Health Department of Mexico, reported here yesterday that African swine fever threatens the country's 14 million hogs.

President Jose Lopez-Portillo has ordered strict security measures in view of the fear that the dreaded epidemic detected in Brazil and the Dominion Republic will reach Mexico.

The government spokesman said that these measures will be adopted at airports and seaports to prevent swine fever from being brought into the country through shoes, clothes, food, vehicles or any other means.

Valdes Ornelas added that, in view of the disease's virulence, certificates of official vaccination must be presented in order to transport hogs, even within the country's interior.

CSO: 5400

STUDY CONDUCTED ON CONTROLLING BOVINE PARASITOSIS

Panama City DOMINICAL in Spanish 2 Jul 78 p 5-E

[Text] According to Moran, 1972, the losses caused by parasitosis are in excess of 30 million per year, with internal parasites responsible for 20 million annually.

Parasitosis is perhaps the most serious livestock problem in the Republic of Panama. This, combined with feed shortages, is a headache for the livestock raiser.

Detailed knowledge of parasitosis would encompass the following:

- 1 Principal parasites present.
2. Places (districts) where each parasite is present.
3. Temperature, humidity and precipitation required by each parasite.
4. Periods of the year when they are most numerous.

These are, in general, the purposes of this article.

With losses in excess of 30 million units, bovine parasitosis, along with feed shortages, is becoming one of the principal headaches of Panamanian livestock raisers. A study of this subject conducted by the National University and private enterprise reports that internal parasites are directly responsible for the loss of some 20 million head of the national herds, making this one of the most serious livestock problems throughout the Republic of Panama. When this fact was uncovered by the above-mentioned team of experts, efforts were exerted to find the controls needed to eradicate bovine parasitosis, to which end fecal samples were collected from cattle from the provinces of Cocolé, Veraguas, Herrera and Los Santos.

The private enterprise group doing this work turned the samples over to analysts, who carried out their exacting tasks in the microbiology and parasitology laboratories of the university. The results obtained in this

way permitted the preparation of maps showing the distribution of internal parasites by province. These maps were given to cattleraisers, along with a list of the names of parasites by animal. The scientists participating in this work, which was also shared by a distinguished group of students, included: Prof Carlos Moran Ramos and Octavio Calcedo, from the microbiology section, School of Biology, Faculty of Natural Sciences and Pharmacy, University of Panama, and technicians Franklin Mora and Eric Dominguez, from the Bayer and Nestle Companies, respectively.

This study, which was recommended by the above-mentioned professionals, is to continue to determine the various genres of parasites existing in Panama, establish strategic treatment which takes into account the cycle of parasites, recommend to the cattle raiser medicines which really will be effective in his herds, and become familiar with the parasites to permit application of specific medicines and to avoid administration of medicines for parasites which are not present. On the parasitosis distribution maps prepared for the four provinces studied thus far, it can be clearly seen that *Strongyloides* is the parasite of greatest distribution.

The clinical characteristics produced by this parasite are anemia, weight loss and a tendency toward lameness, as the larva perforates the skin in order to penetrate. For example, the parasite was observed infecting both adult and young animals in the districts of Los Santos province. If we take into consideration the lesions caused by the parasite and the difficulty of eliminating it because it presents three different forms of life, we have the causes of concern both to technicians and to cattleraisers.

Other parasites studied, such as *Bunostomum*, *Cooperia*, *Ostertagia*, *Oesophagostomum*, *Haemonchus* and *Nematodirus*, are characterized by the consumption of great amounts of blood by their juvenile forms (larvae), at times causing black diarrhea and often death from chronic anemia. It is well known that these parasites retard growth and cause weight losses of from 50 to 70 pounds per animal per year. *Dictyocaulus*, a pulmonary parasite, can produce a considerable number of lesions in the lungs as well as chronic anemia, persistent cough and retarded growth. This is the principal parasite in places with cooler climates and where there is high humidity.

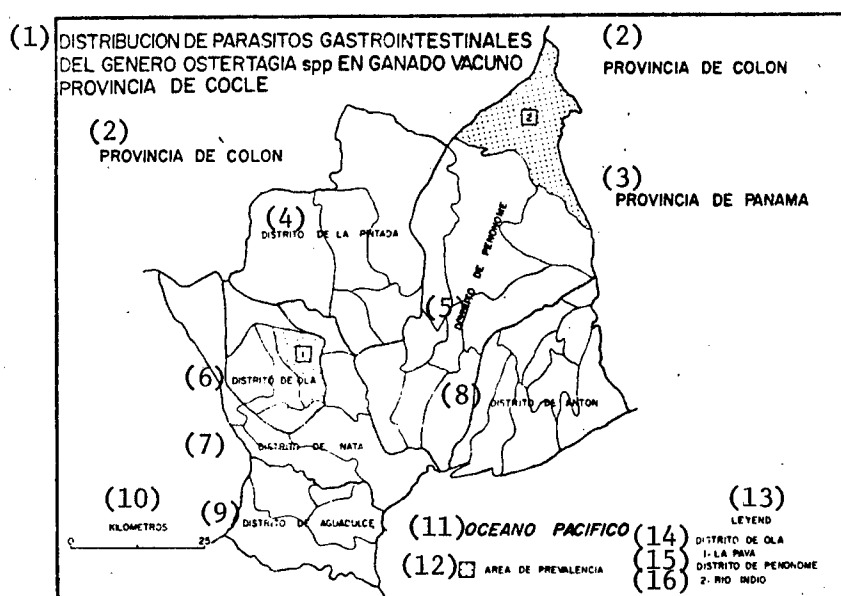
This will permit the veterinarian and cattleraiser to establish the specific treatment for each parasite and put an end to the practice which up to now has prevailed, namely, the deparasiting of animals which often did not require it and, vice versa, failure to treat animals requiring medication. Also, it has often happened that medicines have been administered which are ineffective against the parasites present, and other very expensive medicines are used against a specific parasite which is not present or whose incidence is insignificant.

Doubtless this study has brought about measures to control and combat parasitosis in our country.

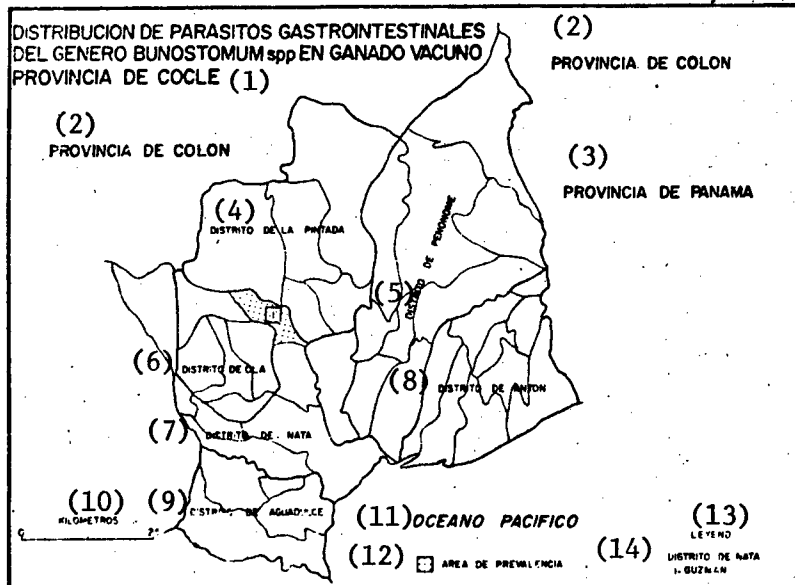
We must point out that this is the first time a study of this kind has been conducted following a methodology capable of withstanding the criticism of different technicians, a study which in the future may, with the hoped-for followup action, establish the real bases for campaigns using strategic treatments.

In the course of the study, from 1975 to the present, more than 40,000 animals have been treated.

Fecal samples of animals were duly analyzed in the microbiology laboratories before and after treatment. In this way it was possible to evaluate the parasiticide capabilities of the various products used.

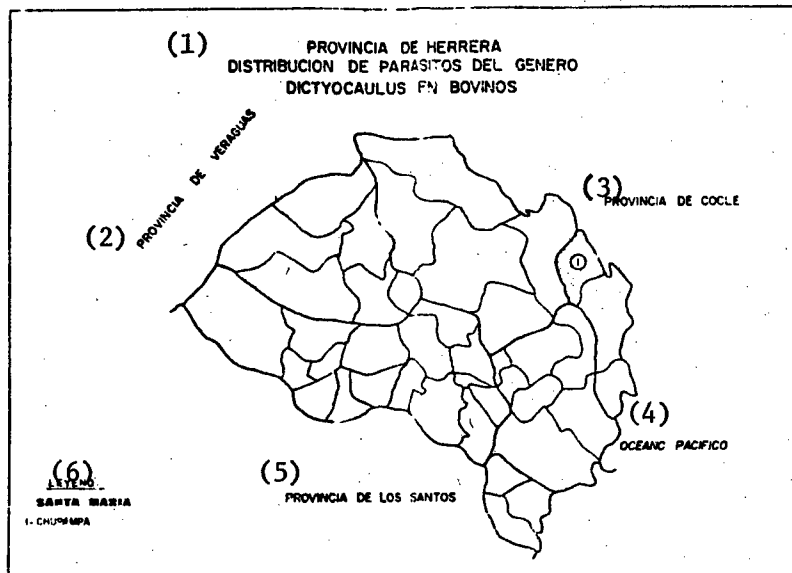


- Key:
1. Distribution of gastrointestinal parasites of the genus *Ostertagia* in cattle--Cocle Province
 2. Colon Province
 3. Panama Province
 4. La Pintada District
 5. Penonome District
 6. Ola District
 7. Nata District
 8. Anton District
 9. Aguadulce District
 10. Kilometers
 11. Pacific Ocean
 12. Area of incidence
 13. Legend
 14. Ola District
 15. Penonome District
 16. Indio River



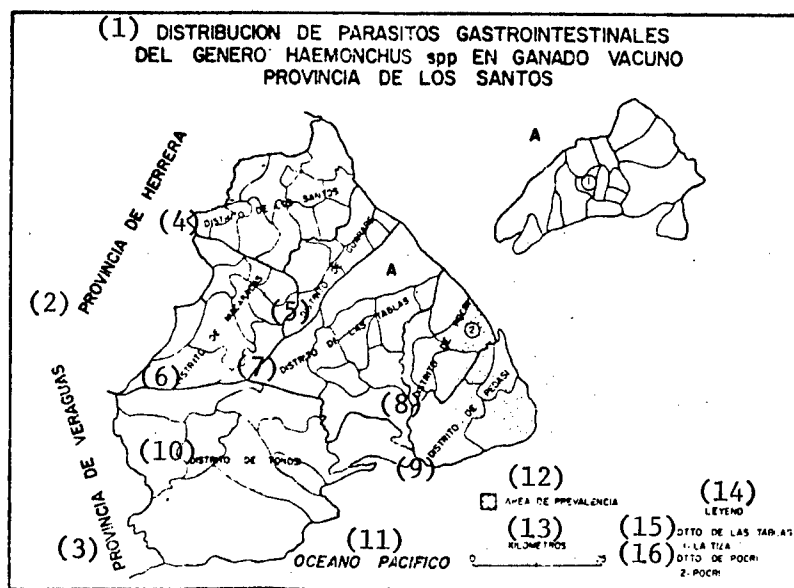
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8. Anton District
9. Aguadulce District
10. Kilometers
11. Pacific Ocean
12. Area of incidence
13. Legend
14. Nata District



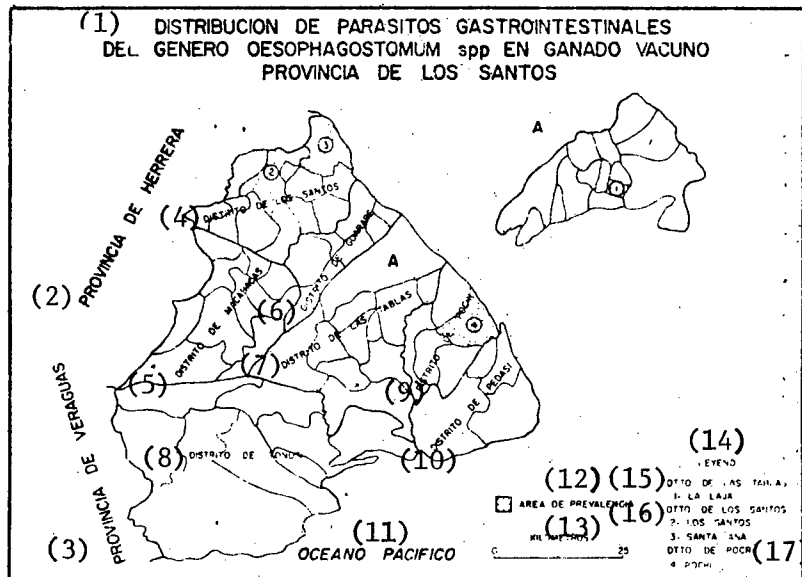
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1. Herrera Province-- Distribution of parasites of the genus Dictyocaulus in cattle
2. Veraguas Province
3. Cocle Province
4. Pacific Ocean
5. Los Santos Province
6. Legend



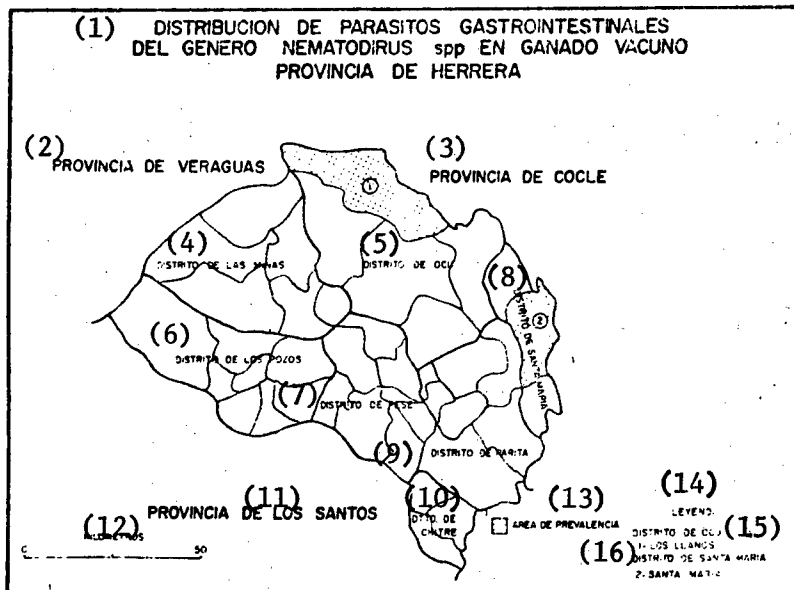
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3. Veraguas Province
4. Los Santos District
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6. Macaracas District
7. Las Tablas District
8. Pocri District
9. Pedasi District
10. Tonosi District
11. Pacific Ocean
12. Area of incidence
13. Kilometers
14. Legend
15. Las Tablas District
16. Pocri District



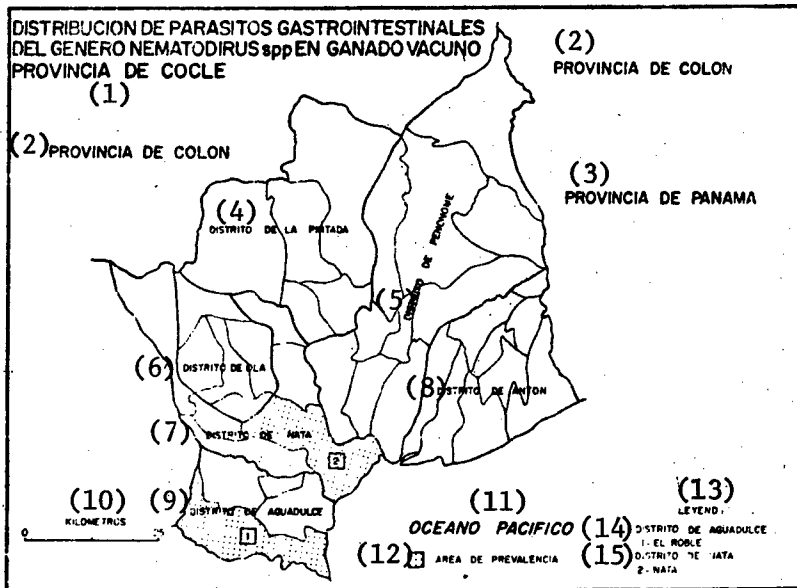
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6. Guarare District
7. Las Tablas District
8. Tonosi District
9. Pocri District
10. Pedasi District
11. Pacific Ocean
12. Area of incidence
13. Kilometers
14. Legend
15. Las Tablas District
16. Los Santos District
17. Pocri District



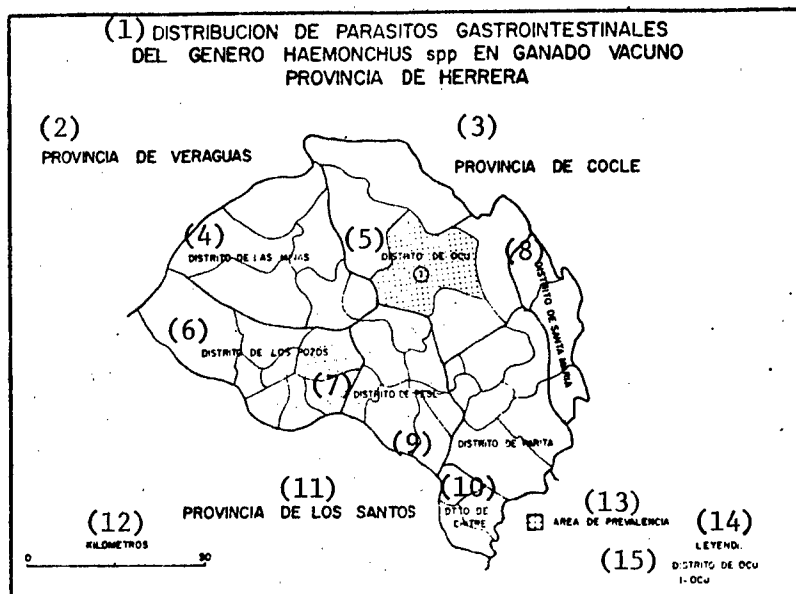
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2. Veraguas Province
3. Cocle Province
4. Las Minas District
5. Ocu District
6. Los Pozos District
7. Pese District
8. Santa Maria District
9. Parita District
10. Chitre District
11. Los Santos Province
12. Kilometers
13. Area of incidence
14. Legend
15. Ocu District
16. Santa Maria District



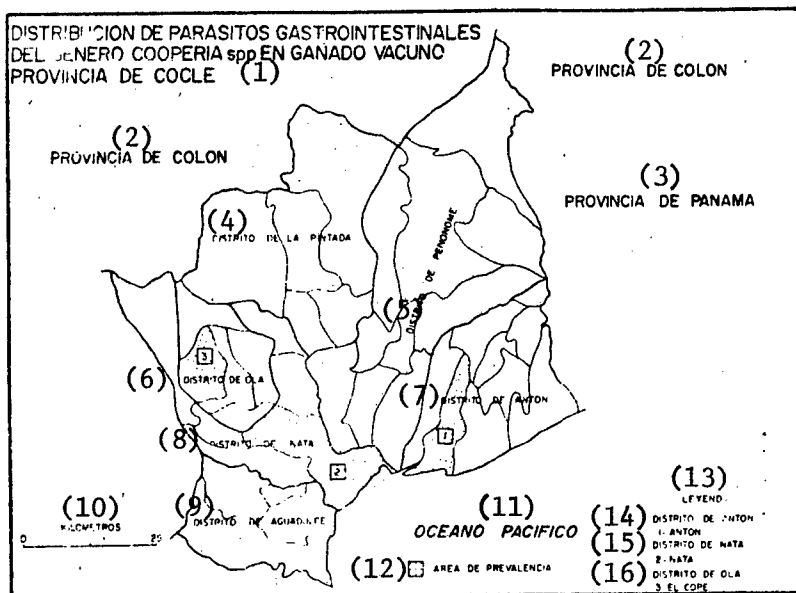
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9. Aguadulce District
10. Kilometers
11. Pacific Ocean
12. Area of incidence
13. Legend
14. Aguadulce District
15. Nata District



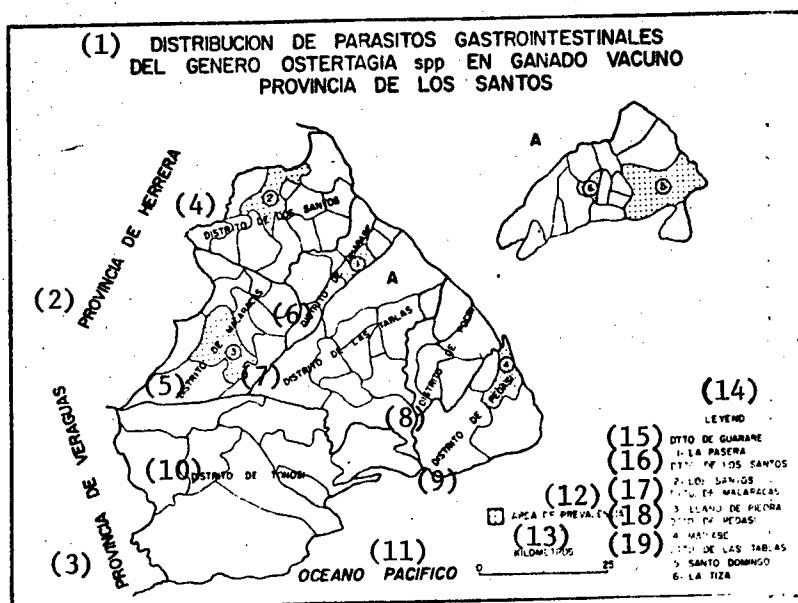
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1. Distribution of gastrointestinal parasites of the genus *Haemonchus* in cattle --Herrera Province
2. Veraguas Province
3. Cocle Province
4. Las Minas District
5. Ocu District
6. Los Pozos District
7. Pese District
8. Santa Maria District
9. Parita District
10. Chitre District
11. Los Santos Province
12. Kilometers
13. Area of incidence
14. Legend
15. Ocu District



Key:

1. Distribution of gastrointestinal parasites of the genus *Cooperia* in cattle--Cocle Province
2. Colon Province
3. Panama Province
4. La Pintada District
5. Penonome District
6. Ola District
7. Anton District
8. Nata District
9. Aguadulce District
10. Kilometers
11. Pacific Ocean
12. Area of incidence
13. Legend
14. Anton District
15. Nata District
16. Ola District



Key:

1. Distribution of gastrointestinal parasites of the genus *Ostertagia* in cattle--Los Santos Province
2. Herrera Province
3. Veraguas Province
4. Los Santos District
5. Macaracas District
6. Guarare District
7. Las Tablas District
8. Pocri District
9. Pedasi District
10. Tonosi District
11. Pacific Ocean
12. Area of incidence
13. Kilometers
14. Legend
15. Guarare District
16. Los Santos District
17. Macaracas District
18. Pedasi District
19. Las Tablas District

8143

CSO: 5400

PARAGUAY

BRIEFS

SWINE VIRUS CAMPAIGN--The sanitary authorities of the country estimate that the Paraguayan campaign to combat the African swine virus will demand an investment of approximately \$350,000. The Paraguayan Government has requested assistance from international financial organizations to carry out this campaign. [Asuncion ABC COLOR in Spanish 26 Jul 78 p 13 PY]

CSO: 5400

DILFA VACCINATES CATTLE AGAINST FOOT AND MOUTH DISEASE

Montevideo EL DIA in Spanish 28 Jun 78 p 9

[Text] All the animals in the country's bovine cattle herds must be immunized against foot and mouth disease between 1 and 15 July.

In instances wherein the vaccination cannot be given within the established period of time, and provided this is due to causes beyond control which must be sufficiently explained, a request must be made for permission to vaccinate at another date and submitted to the Veterinary Department of the Directorate for Combating Foot and Mouth Disease [DILFA].

Special Form

Next season, it will not be necessary for those producing or owning bovine cattle ranches to notify the police authorities of the day on which they will inoculate their cattle. On the contrary, that statement must be made to the distributor from whom they purchase the necessary vaccine, and the respective date will be entered on an especially devised form, containing that and other information. The Directorate for Combating Foot and Mouth Disease thanks the police throughout the country for the invaluable cooperation that they have offered on previous occasions.

Strict Control

Strict control will be observed, using modern computation methods, based on a form the first two copies of which will be kept in the DILFA offices, the third copy will be given to the vaccine purchaser and the fourth will be kept by the seller. The vaccine distributors with authorization from DILFA must fill in the form in question, with all the necessary information, including: firm name, residence, department, locality and a 5-digit number which DILFA will provide and which will be used as a single control number; date of the sale of the vaccine and exact date on which the vaccination will begin, although that task may be performed on more than one day. Other essential information which the distributors from the manufacturing laboratories must include on the form in question consists of: brands and series of the vaccines that are sold, placing special emphasis on the number of the series; a number

assigned by DILFA to each manufacturing laboratory; the number of doses sold; and a DINACOSE [National Marketing and Distribution Enterprise ?] number, which the individual concerned will enter.

These entries must be made in such a way that they will be easy to read, because they are essential to the computation work.

When individuals who have livestock at more than one location in the same department are involved, the area in which the vaccination is to begin will be noted.

If the producer has herds located in fields located in different departments, as many orders of vaccine will be made as there are departments cited, and also as many orders of vaccine will be filled in as there are DINACOSE numbers entered.

The purchase of vaccine for animals in pasturelands will be recorded with the DINACOSE number pertaining to the owner of the livestock. If they are in different locations or departments, the steps that have been explained will be taken.

Appeal to Producers

Supplementing the control to be carried out through the procedures that have been detailed, the General Department of Veterinary Services of the Ministry of Agriculture and Fishing and the Directorate for Combating Foot and Mouth Disease address themselves to livestock producers, urging them to apply the greatest dedication to the immunization effort. The satisfactory state of health that exists in Uruguay in this and other categories is not like that existing in the rest of South America.

Form that must be filled out by distributors of the anti-foot and mouth disease vaccine, containing information on the product and type of vaccine. The drive begins on 1 July.

M.A.P. - D.G.S.V.
1. DILFA. DESPACHO de VACUNA ANTIAFTOSA

a. RAZON SOCIAL _____
b. DOMICILIO _____
c. DEPARTAMENTO _____
d. LOCALIDAD _____

e. ADQUIRENTE _____

a. RAZON SOCIAL _____

c. DEPART. _____ f. PARAJE _____

g. DESPACHO
DIA MES AÑO
h i j

k. FECHAS VACINACION
1. m. BOVINO 1
n. OVINO 2
DIA MES AÑO
h i j

O. No. DINACOSE

D. V A C U N A			Q. CANTIDAD DOSIS	
r. MARCA	s. No.	t. SERIE	m. BOVINOS	n. OVINOS
u. TOTAL DOSIS				

v. ORIGINAL
PARA
DILFA CENTRAL

Formulario que deberán llenar distribuidoras de la vacuna antiaftosa y que contiene datos del producto, y tipo de vacuna. La campaña comienza el 1º de julio.

Key:

1. Ministry of Agriculture and Fishing, General Department of Veterinary Services, DILFA, Order for Anti-Foot and Mouth Disease Vaccine

- | | | | |
|---------------|-------------|----------------------|----------------------------------|
| a. Firm name | f. Location | k. Vaccination dates | p. Vaccine |
| b. Residence | g. Ordered | l. For herd | q. No of doses |
| c. Department | h. Day | m. Bovine | r. Brand |
| d. Locality | i. Month | n. Ovine | s. Number |
| e. Purchaser | j. Year | o. DINACOSE No | t. Series |
| | | | u. Total doses |
| | | | v. Original for
Central DILFA |

AUTHORITY ON PROPHYLAXIS, SANITATION IN BEEF INDUSTRY

Montevideo EL DIA in Spanish 30 Jun 78 Supplement p 6

[Text] Together with other factors such as fertility, nutrition, management, etc., sanitation plays a preeminent role in the production of beef cattle. Therefore, when undertaking this kind of production in an attempt to improve the level of its efficiency, one must consider the sanitary aspect one of the key factors for improving that level.

Prophylaxis and prevention should be the prevailing slogan claims Dr Ruben Fostel, summarizing in those words the proper system that should be adopted to provide for the sanitation in a business establishment. Emphasis must be placed on all aspects of sanitation, from a preventive standpoint, whether it be through vaccination or a suitable management system. In the case of parasitical diseases, the vaccination must be carried out constantly, as part of an annual plan for strategy, and a tactical plan when circumstances make it necessary to abandon the preestablished vaccination periods. Dr Fostel says that we must shorten the parasitic cycles by applying medicine for preventive purposes. Moreover, the effort for managing the establishment is very important to back up this endeavor of prophylaxis. In other words, the grazing must be deferred and rotated with certain types of herds. The pastures which are heavily infested with parasites must be used for grazing by less susceptible herds, or by herds with which the crossbreeding of parasites does not occur.

The expert added that we cannot expect genetic improvement or greater productivity if we have "undesirable members" in the establishment which are deterring and hampering our production

Infectious Diseases

Within the group of infectious diseases, in the first place provisions must be made for the compulsory vaccines, such as those against foot and mouth disease and brucellosis; then, those against bacterial anthrax, symptomatic anthrax [blackleg], gaseous gangrene and other strains of virus which act during certain seasons and among certain herds. Dr Fostel said that, in addition to these fundamental vaccinations, there are other inoculations

that are recommended for establishments which have had a health problem, such as infectious pneumonia, etc.

In commenting on the parasitical diseases, the expert said that they can be controlled both with treatment of a preventive nature (in other words, before the disease makes greater progress) and with proper management.

He was asked: Are there diseases in our country at present which constitute a serious threat to livestock production?

He replied: "Insofar as infectious diseases in our country are concerned, the ones which are combated on a compulsory basis have been assuming lesser importance. For example, in other years foot and mouth disease really had a negative effect on production, both in the development of the young animal and with regard to mortality and as the cause of a large number of abortions.

"Other diseases which constituted a national problem in other times were brucellosis, strain 19 or contagious abortion, which have now declined to really insignificant and low figures as a result of the compulsory vaccination drive."

Dr Fostel said: "In other words, nowadays, as a result of the prophylactic campaign that is being carried out, these two diseases which may be regarded as the most important have no significance as factors affecting efficient beef production.

"Nevertheless, there are other types of diseases which have caused considerable losses in certain establishments that do not perform proper vaccination, such as clostridiosis, which was previously detected as carbuncle or gangrene. Before the death of an animal attacked by this disease, the cause was usually attributed to factors of another kind such as meteorism, death by lightning, etc., disregarding the diagnosis." The expert added that there are effective vaccines against this disease and, therefore, during critical periods the loss of livestock should be prevented by administering the pertinent vaccinations.

Parasitical Diseases

Parasitical diseases have also had a great effect on the development and productivity of the beef industry throughout the country. Dr Fostel continued: "As we have noted, these diseases can be prevented or combated before they develop, through the strategic or tactical use of specific products, and through proper management in the establishment." Commenting on the parasitical diseases which have had the most serious effect in our country, the expert cited hookworm, or emoncus or emoncosis, one of the parasites which most attacks our herds during most of the year, especially during the past 4 years, when we have had a damp climate which fosters the massive growth of this parasite in all establishments, causing sizable losses.

"Another of these diseases which has assumed importance in our fields, likewise during the past few years, is fasciolia hepatica, or liver fluke.

"In addition to being possible to combat with specific products that are known, the parasitic disease can likewise be effectively fought with special management systems. In establishments where the level of nutrition is sufficient, fewer animals are affected by the problem of parasitic diseases." In discussing the management system, Fostel said that it is aimed at making suitable rotations of the pastures, in accordance with the herds and infection of those pastures.

That is to say, the developed adult animals are less susceptible to these diseases, and hence can use pastures in which a certain amount of infection exists.

Specifically, the battle against all these diseases may be summarized in one word: prophylaxis; through vaccination in the case of infectious-contagious diseases and, in connection with those which cannot be precluded through vaccination, treatment should also be given from a preventive standpoint, that is, through the application of medicine when the diseases begins to develop (shortening the parasitical cycles). And all this must be supplemented with management of pastures based on the immunity of the herds.

Photo Caption:

Dr Ruben Fostel, a technician from MERC Laboratories for Uruguay, who has served for years on the board of admission for country fairs. A veterinary consultant for the ARU [Rural Association of Uruguay ?], he reports on sanitary management of the herds of beef cattle.

2909

CSO: 5400

INTER-AFRICAN AFFAIRS

LOCUST SWARMS REPORTED IN SEVEN PROVINCES

LD242028Y Addis Ababa in English to Neighboring Countries 1530 GMT 24 Jun 78 LD/EA

[Text] The Desert Locust Control Organization for Eastern Africa has said that in the last 6 weeks 50 swarms have been reported from 7 provinces of Ethiopia. Revealing the locust situation in the country, the organization disclosed that out of the 50 swarms reported, 21 were intercepted and controlled by aerial spraying, mainly in the railway line area between Arargota and Meiso, Jijiga and the Hararge highlands. Moreover, two swarms were reported to have been located in Wollo and one in Gojam respectively. Meanwhile, operations against the swarms have been going on in Hararge, Wollo and Gojam. The report also disclosed that the possibility of swarms moving and (?directing) to Tekeze valley and penetrating into the summer breeding areas of the Sudan cannot be overruled. The report adds that vigilant ground surveys must be conducted by local farmers and also pointed out that the Red Sea coastal area must be under very close attention. It was stated that aircraft could be used, could be mobilized for air-to-ground hopper barriers spraying provided their target and genuine reports are provided in good time.

CSO: 5400

DJIBOUTI

LOCUST SWARMS REPORTED IN DJIBOUTI

LD170234Y Dar es Salaam Domestic Service in Swahili 1730 GMT 16 Jun 78 LD/EA

[Text] Nairobi--Locust swarms which have invaded Somalia and Ethiopia have now entered Djibouti. Officials of the Desert Locust Control Organization today said that apart from the 67 swarms sighted in Somalia and Ethiopia, three other swarms have now been sighted in Djibouti. Insecticide-spraying aircraft stationed in Nairobi had already sprayed 21 swarms of locusts, including the swarm located north of Addis Ababa. Desert Locust Control Organization officials said that the work of spraying the breeding grounds of the locusts in the Ogaden has been hampered by the war between Ethiopia and Somalia. Kenya has provided over 16 million shillings to fight the locusts and to revive the emergency locust committee, which last met in 1968.

CSO: 5400

ETHIOPIA

BRIEFS

LOCUST DAMAGE--The Office for Cooperative Work and Agricultural Development in Hararge administrative region reports that swarms of locusts sighted this year in four [as heard] of the region's districts have caused damage to various types of crop seedlings. The districts affected by the locust swarms are Jijiga, Wobera, Diredawa, Issa, Gurgura, Chercher, Adal and Garaguracha. The necessary protective action was taken after office employees reported the matter to the locust control organization. [Text]
[Addis Ababa Domestic Service in Amharic 1700 GMT 13 Jul 78 LD/EA]

CSO: 5400

HUNGARY

BRIEFS

EXTENSIVE PLANT DISEASES--There is very extensive grain mildew throughout the country. At present, the disease has reached the upper leaves; in some areas it is even attacking the spikes. It is important to protect the upper leaves which have a crucial effect on the grain crop, through repeated spraying. The unusually cool spring weather followed by sudden warmth and humidity has led to the multiplication of plant lice. Fruit trees were primarily affected followed by soft-stemmed plants such as wheat, peas, sugar beets, corn, sunflower, peppers. The infestation had become dangerous in the case of peas and sugar beets by early June, because these crops are considerably less well developed than usual for that time of year. This development lag can be termed critical, especially in the case of sunflowers. If the weather remains humid, protective measures must be taken. Symptoms of potato blight were first observed in Bekes County this year. Wet weather in May favored the spread of the disease. Should the humidity be in excess of 75 percent for a 48-hour period or if it rains before the end of the incubation period, it will be necessary to take action, especially in the case of early maturing potatoes, since these are most seriously affected. [Budapest MAGYAR MEZOGAZDASAG in Hungarian 15 Jun 78 p 31 WA]

CSO: 5400

'STATESMAN' CALLS LOCUSTS 'PLAGUE ON WINGS'

Calcutta THE STATESMAN in English 15 Jul 78 p 6

[Editorial]

[Text]

THE Union Agriculture Ministry and the State authorities in Gujarat, Rajasthan and Haryana have together won the first round of the battle against the locust invasion last month. But that was an easy round in which the largest swarm involved spread over just a few square miles. Experts at the United Nations Food and Agriculture Organization reckon that the world is only in "first stages of a plague" and are not at all sure that they will be "able to cope" with the worst that is yet to come. There are some 50 swarms in the Horn of Africa, which are rapidly building up, and the Desert Locust Control Organization of East Africa, with headquarters in Addis Ababa, can do little to combat the menace at the starting point. Hostilities between Ethiopia and Somalia over the Ogaden and the Eritrean irredentism have made it all but impossible to deal with the winged plague. Aerial and satellite surveillance indeed help in tracking locust movements, but it is not the same thing as destroying them in their traditional breeding grounds in the Horn. The fact

that locusts have crossed the Atlantic to play havoc with the wheat and corn fields of Kansas and Nebraska in the United States is a grim warning to the less developed and more vulnerable countries of Africa, West Asia and the desert areas on the Indian subcontinent. The present threat is the worst in 16 years and belies last year's cosy assumptions that the world might have seen the last of the locusts.

At present as many as 50 Asian and African countries are faced with the imminent threat of the plague on wings. The size and scale of the destruction it inflicts makes the mind boggle. A single locust can eat as much grass as half a dozen cows and a largish swarm spreads as wide as 100 to 400 square miles. It is not unusual for a female to lay anything from 400 to 800 eggs at a time and for the hoppers, not yet able to fly, to destroy crops over vast tracts of land. Spraying aldrin and dieldrin from low flying aircraft and from the exhausts of jeeps is an effective way of destroying locusts. But not many count-

ries are well prepared to deal with the problem. As Mr Barnala has noted in his letter to State Chief Ministers, most of the field staff of the Indian locust control organization have long been out of touch with the practical side of their jobs. This is true of the rest of the world as well.

Moreover, the best efforts by individual countries add up to little if some of the vulnerable States, particularly the traditional breeding grounds in east and central Africa, such as those in the Horn and Chad in the darker depths of the continent, the warring Yemens and Lebanon in West Asia, fail to pull their weight in fighting the locust menace. On present form they can hardly be depended upon to do what is expected of them and international organizations seem helpless in the matter. Against this depressing backdrop it is something to be thankful for that India and Pakistan, despite their consuming preoccupation with lower level politics, have entered into a working agreement on meeting and eradicating the locust menace at the points of entry.

CSO: 5400

INDIA

BRIEFS

LOCUST THREAT TO UTTAR PRADESH--Lucknow, July 14--The locusts invading Rajasthan may enter the adjoining areas of Uttar Pradesh, reports PTI quoting official reports. Farmers have been alerted to pass on information on locust movements to the local tehsildar and block development officer. The locusts, as soon as they land, should be destroyed with kerosene oil or BHC 10 percent. [Text] [Calcutta THE STATESMAN in English 15 Jul 78 p 1]

LOCUST THREAT TO CONTINUE--New Delhi, July 17--The threat of locust infestation will continue till at least the end of this month, according to warnings given to the States adjoining Gujarat, Rajasthan, Haryana and Punjab. It is known that the threat comes not only from the swarm that entered the country from the west--most probably from across the Arabian Sea as dead locusts washed up on the Baluchistan coast and reports of a swarm from across the sea in June would suggest--but also from those that have bred in the country. [Text] [Calcutta THE STATESMAN in English 18 Jul 78 p 7]

CSO: 5400

LEBANON

LOCUST INVASION OF SOUTHERN LEBANON NOW ACUTE

TA231117Y Paris AFP in English 1110 GMT 23 Jun 78 TA

[Text] Beirut, June 23 (AFP)--A locust invasion in southern Lebanon became acute today as a new wave of insects swarmed into the central sector of the region, it was learned here. Local farmers fighting off the locusts are being helped by a United Nations peacekeeping force helicopter.

The results of an Agricultural Ministry study to determine precisely to which species the locusts belong will be known tomorrow. UN Food and Agricultural Organization representatives in Lebanon will meet ministry officials today. Southern Lebanese farmers, already hard hit by the Israeli-Palestinian conflict are calling for immediate government help. "The locusts will not wait for the ministry to complete its research before they eat everything," they said. Parallels between this invasion and that of 1916-1917 are being drawn, when Lebanese vegetation was totally ravaged by locusts.

CSO: 5400

MALI

FINANCIAL PROBLEMS FACE ANTI-LOCUST ORGANIZATION

PA240131Y Paris AFP in English 0035 GMT 24 Jun 78 PA

[Excerpt] Bamako, Mali, June 23 (AFP)--The international organization against African migratory locusts is in financial difficulty because member states keep falling behind more and more on paying their dues, its new president, Ghanaian Agriculture Minister Colonel S.M. Akwagyiram, said here today.

Colonel Akwagyiram appealed to the 17 African states which comprise the organization to pay their dues to enable it to confront the growing threat of a plague of locusts in East Africa.

Colonel Akwagyiram today wound up a week's visit to Mali to consult with the anti-locust organization's administrative headquarters in Bamako with a view to its next meeting, to be held in Kinshasa next July 10 to 12.

CSO: 5400

MEXICO

BRIEFS

COFFEE PLAGUE THREAT--Jalapa, Mexico, 13 Jun (EFE)--Coffeegrowers of Veracruz State are very worried over the appearance of the stalk borer, a worm that destroys coffee plants, in the fields of Tlapacoyen, 50 kms north of Jalapa. Experts of the Agriculture Secretariat have been sent to the area to study the situation. [Madrid EFE in Spanish 1219 GMT 13 Jun 78 PA]

CSO: 5400

BRIEFS

NEW OUTBREAK OF COFFEE RUST--A new coffee rust outbreak was identified in time in the anti-rust campaign waged by the Ministry of Agriculture. Measures were implemented immediately by campaign personnel, who destroyed the contaminated leaves and vegetation within a 30-meter radius from the place where the disease was discovered--in the Montevideo plantation of the Alejandria farm owned by the well-known coffee grower Nicolas Bolanos Geyer--in a place known as "Cuatro Esquinas" in Carazo Department. The farm was immediately placed in strict quarantine while antirust brigades search the surrounding area for signs of contamination. The farm covers about 80 manzanas. According to orders decreed by the president, and announced to all coffee growers, Bolanos will be indemnified for the damage. [Excerpts] [Managua NOVEDADES in Spanish 10 Jul 78 p 9 P]

COFFEE RUST UNDER CONTROL--According to Agriculture and Livestock Minister Klaus Sengelmann, over half the original outbreak of coffee rust disease, currently contained within a quarantine area, has been eradicated. The minister added that the proper procedure for fighting the disease has apparently been found and now there is a 95-percent probability that there will be no new outbreak of the disease. [Managua Radio Corporacion in Spanish 0400 GMT 24 Jul 78 PA]

CSO: 5400

PAKISTAN

BRIEFS

ANTI-LOCUST OPERATIONS-Intensive locust control operations against hoppers remained in progress in Sind Province. A desert area of about 8 square kilometers was sprayed as a preventive measure. The area along the Indo-Pakistan border was surveyed by air but no locust swarms were detected. [Karachi Domestic Service in English 1700 GMT 15 Jul 78 BK]

CSO: 5400

PEOPLE'S REPUBLIC OF CHINA

KIANGSI CIRCULAR URGES FIGHT AGAINST DROUGHT, INSECTS

HK101208Y Nanchang Kiangsi Provincial Service in Mandarin 1100 GMT 8 Jul 78 HK

[Text of Kiangsi provincial CCP and revolutionary committees 6 July urgent circular calling on the party, government, army and people in Kiangsi to urgently launch a struggle to guard against and combat drought and insect pests and win a complete victory in the battle of crash-reaping and sowing]

[Excerpts] 1. Under the leadership of the party Central Committee headed by wise leader Chairman Hua, armymen and people throughout Kiangsi have resolutely implemented the strategic policy decision to grasp the key link in bringing about great order across the land, have resolutely implemented the 11th CCP Congress line and the Fifth NPC resolutions, and have widely and penetratingly publicized and implemented the general task for the new period. They have continued to penetratingly launch the struggle to expose and criticize the gang of four and have persistently grasped the three great revolutionary movements simultaneously. These efforts have given rise to an excellent situation of thriving revolution and production in the cities and countryside in Kiangsi. The mass movements to learn from Tachai in agriculture and to build Tachai-type counties in the countryside have developed prosperously and a bumper early rice harvest is expected. The growth of cotton and other economic crops has been fine and the situation is very pleasing.

However, we must see that agricultural production in Kiangsi faces serious threats from drought and insect pests. There has been comparatively little rainfall in most Kiangsi areas during the first 6 months of this year, apart from southern Kiangsi where there has been comparatively heavy rainfall. Reservoir water reserves are generally inadequate.

Since the beginning of the middle of June, there has been no rainfall in most of the areas and temperatures have risen continuously. The drought has developed very quickly and is becoming more serious day by day. In a small number of places, early rice has already suffered from the drought. The drought is even more serious for cotton and other economic crops. According to meteorological forecasts, rainfall will still be comparatively less in July and the drought will continue.

In addition to the drought and high temperatures, insect pests and plant diseases are also becoming more and more serious. This situation seriously threatens a bumper early rice harvest, the cultivation and transplanting of late rice and an increase in cotton and other economic crop yields. It will probably adversely affect the victorious fulfillment of this year's agricultural production plan.

This year is important for grasping the key link in bringing about great order across the land and in making great achievements in 3 years. We have shouldered the glorious task of achieving the grain production quotas set by the national agricultural development program and of surpassing the best historical economic crop levels. For this reason, the Kiangsi provincial CCP and revolutionary committees hereby call on the party, government, army and people in Kiangsi to take immediate and urgent action, be greatly determined and exert great efforts. They must learn from the Tachai people, carry forward the revolutionary spirit of "when there is a great drought, people must exert great efforts," and launch a struggle to guard against and combat drought and insect pests. They must insure a bumper early rice harvest, win a complete victory in crash-reaping and sowing, and strive to win an overall victory in this year's agricultural production.

2. We must firmly grasp the key link of exposing and criticizing the gang of four, do well in fighting the third campaign, and continue to penetratingly publicize the general task for the new period. We must publicize and implement the instructions of the CCP Central Committee on transmitting the report by the Hsianghsiang County CCP Committee of Hunan and the draft plan to implement on a trial basis the views of the Kiangsi Provincial CCP Committee on several current issues in the countryside, further implement the party's various rural economic policies, and use the party's policies to mobilize the activism of the cadres and masses to develop socialism in a big way. We must organize a grand force and, through joint endeavour, fight against natural disasters to reap a bumper harvest.

3. We must firmly establish the determination to fight against natural disasters to win a bumper harvest, be prepared to fight against drought for a long time, and firmly grasp the initiative in the struggle to fight against drought. We must base ourselves on self-reliance and hard struggle, do everything possible to overcome various difficulties, and open up more sources of water. All reservoirs must do well in promoting water conservation and in using water scientifically. They must adopt some temporary measures to dam those sources of water which can be dammed. For those reservoirs which have both electric power generation and irrigation capabilities, electric power generation must give way to irrigation.

We must strengthen the management of water conservancy projects, take into consideration both the upstream and the downstream, and achieve planned and economic use of water and reasonable irrigation. We must resolutely overcome slow irrigation, do everything possible to enhance the technology of water usage, and try our best to enlarge irrigated areas.

We must firmly grasp the building of those water conservancy and irrigation projects currently under construction, do well in producing complete sets of equipment and in digging channels and ditches, and strive to put them into effect for late rice cultivation. We must economize on the use of water, petroleum and electric power. We must advocate and carry forward the communist spirit of cooperation, harness water and fight against drought in unity and take care of and support each other. We must resolutely deal blow at the sabotage of the class enemies.

4. All trades must vigorously support the battles to guard against and combat drought, insect pests and plant diseases, and to crash-reap and sow. They must persistently maintain taking agriculture as the foundation, think of the needs of agriculture, do more good deeds for peasants, and strive to contribute more to fighting against natural disasters to win a bumper harvest.

5. Leadership must be strengthened. All leaders must go to the frontline to guard against drought and insect pests, and to crash-reap and sow. They must act as both commanders and fighters. Apart from leaving a small number of people to take care of the daily routines, most cadres of various county and commune organs must go to the frontline of the countryside.

Led by leading cadres, various provincial, prefectural and municipal organs and various PLA units stationed in Kiangsi must organize large groups of forces to go down to the countryside to participate in the struggle. They must do well in guarding against and combating drought and insect pests and in supporting crash-reaping and sowing. They must strive to reduce the number of meetings, change their work style, persistently maintain cadres participating in collective productive labor, and be concerned about the life of the masses. Flood-prevention and drought-fighting headquarters at all levels must have special people to assume responsibility.

They must strengthen the connection between the higher and lower levels, grasp the situations at all times, do well in conducting investigations and study, and sum up and popularize their experiences in a timely fashion.

All party organizations in Kiangsi must have the secretaries take command, get the whole party mobilized, and get all trades to go all out. They must mobilize all positive factors, bring into full play the socialist activism of the cadres and masses, resolutely win in the battle against drought and insect pests, win a complete victory in crash-reaping and sowing, strive to insure that this year's average grain yield per mou in Kiangsi will meet the quotas set by the national agricultural development program, and make new contributions toward realizing the four modernizations.

CSO: 5400

VIETNAM

BRIEFS

CUU LONG INSECT CONTROL--To date 13,830 hectares of summer-fall rice area in Cuu Long Province are affected by brown planthoppers. The local peasants have used lime and woodash on affected ricefields to kill the planthoppers and save the crop. In addition, the peasants have also adopted other measures to eliminate harmful insects and prevent them from moving into other cultivated areas. [Ho Chi Minh City Domestic Service in Vietnamese 1200 GMT 25 Jul 78 BK]

CSO: 5400

END